

# THE AMERICAN PSYCHOLOGIST

VOLUME 6



NUMBER 9

*September, 1951*

*Published Monthly by*  
THE AMERICAN PSYCHOLOGICAL ASSOCIATION, INC.



## **PERSONNEL ADMINISTRATION. New 2nd Edition**

By PAUL FIGORS and CHARLES A. MYERS, Massachusetts Institute of Technology. 614 pages, \$6.00

This text continues to be the only textbook in the field that consistently develops the concept of integrative personnel administration. It explains *why* policies and procedures are adopted instead of merely relating *what* is being done. Personnel administration is always considered as a process in which policies and practices mutually reinforce each other.

## **LANGUAGE AND COMMUNICATION**

By GEORGE A. MILLER, Harvard University. *McGraw-Hill Series in Psychology*. 298 pages, \$5.00

The purpose of this text is to assemble in one book for the use of the psychologist the more important approaches to the study of communicative behavior and to suggest the breadth of the spectrum of linguistic studies. The approach is, in general, behavioristic.

## **PRINCIPLES OF GUIDANCE AND PUPIL PERSONNEL WORK.**

**New 4th Edition**

By ARTHUR J. JONES, University of Pennsylvania. 630 pages, \$4.75

A revision of this highly successful text, the fourth edition, while essentially unchanged in organization and fundamental concept, includes all the important postwar developments in the field with new or increased attention to such areas as adult education, the relationship between guidance and pupil personnel work, and the latest methods used by those school systems which are leaders in the field.

## **PERSONALITY AND PSYCHOTHERAPY. An Analysis in Terms of Learning, Thinking and Culture**

By JOHN DOLLARD and NEAL E. MILLER, Yale University. *McGraw-Hill Publications in Psychology*. 479 pages (textbook edition), \$5.00

Deals with abnormal behavior and psychotherapy, since they bring out clearly factors that are crucial in the dynamics of the normal personality. A wide range of material is integrated: basic principles of learning, socially learned drives, new experimental studies of fear, etc. Three great traditions are brought together—psychoanalysis, the exact methods of the experimentalists, and modern sociology and anthropology.

*Send for copies on approval*

**McGRAW-HILL**



**BOOK COMPANY, Inc.**

330 WEST 42nd STREET • NEW YORK 18, N. Y.

# THE AMERICAN PSYCHOLOGIST

The Professional Journal of the American Psychological Association, Inc.

---

Volume 6

September, 1951

Number 9

---

## *In this Issue*

Robert R. Sears (portrait) .....	475
A Theoretical Framework for Personality and Social Behavior. ROBERT R. SEARS .....	476
Proceedings of the Forty-Third Annual Meeting of the Southern Society for Philosophy and Psychology. D. MAURICE ALLAN .....	484
Proceedings of the Thirty-First Annual Meeting of the Western Psychological Association. BRANT CLARK .....	489
Proceedings of the Twenty-Third Annual Meeting of the Midwestern Psychological Association. DAVID A. GRANT .....	503
Proceedings of the Twenty-Second Annual Meeting of the Eastern Psychological Association. CHARLES N. COFER .....	512
Proceedings of the Twenty-First Annual Meeting of the Rocky Mountain Branch of the American Psychological Association. LAWRENCE S. ROGERS .....	518
Across the Secretary's Desk .....	520
The Members Talk About APA Problems	
Psychological Notes and News .....	522
Convention Calendar .....	525

---

*Editor:* Fillmore H. Sanford

*Managing Editor:* Lorraine Bouthilet

THE AMERICAN PSYCHOLOGIST is published monthly by the American Psychological Association, Inc., at Prince and Lemon Streets, Lancaster, Pennsylvania. Subscription: \$7.00, single copy \$.75. Communications on business matters should be addressed to Publishers, The American Psychologist, Prince and Lemon Streets, Lancaster, Pennsylvania, or the American Psychological Association, Inc., 1515 Massachusetts Ave., N.W., Washington 5, D. C. Address communications on editorial matters to 1515 Massachusetts Ave., N.W., Washington 5, D. C.

Entered as second-class matter January 12, 1950 at the Post Office at Lancaster, Pa., under the Act of March 3rd, 1879. Acceptance for mailing at special rate of postage provided for in paragraph (d-2), section 34.40, P. L. and R. of 1948, authorized August 6, 1947.

# OFFICERS OF THE AMERICAN PSYCHOLOGICAL ASSOCIATION, INC.

## President

J. McV. HUNT  
University of Illinois  
Urbana, Illinois

## President-elect

LAURANCE F. SHAFFER  
Teachers College  
Columbia University

## Recording Secretary

DOROTHY C. ADKINS  
University of North Carolina  
Chapel Hill, North Carolina

## Treasurer

CARROLL L. SHARTLE  
The Ohio State University  
Columbus 10, Ohio

## Executive Secretary

FILLMORE H. SANFORD  
1515 Massachusetts Ave., N.W.  
Washington 5, D. C.

## Board of Directors

THE PRESIDENT, THE PRESIDENT-ELECT,  
THE RECORDING SECRETARY, AND THE TREASURER

E. LOWELL KELLY  
RENSIS LIKERT  
JEAN W. MACFARLANE

ARTHUR W. MELTON  
O. HOBART MOWRER  
ROBERT L. THORNDIKE

All general communications, inquiries concerning membership, letters concerning dues, subscriptions, and changes of address, announcement of posts, and requests for placement should be directed to:

AMERICAN PSYCHOLOGICAL ASSOCIATION, INC.  
1515 Massachusetts Avenue, N.W.  
Washington 5, D. C.

---

## PUBLICATIONS OF THE AMERICAN PSYCHOLOGICAL ASSOCIATION

### AMERICAN PSYCHOLOGIST

*Editor:* FILLMORE H. SANFORD, *American Psychological Association*. Contains all official papers of the Association and articles concerning psychology as a profession; monthly.

Subscription: \$7.00 (Foreign \$7.50). Single copies, \$.75.

### JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY

*Editor:* J. McV. HUNT, *University of Illinois*. Contains original contributions in the field of abnormal and social psychology, reviews, and case reports; quarterly.

Subscription: \$6.00 (Foreign \$6.50). Single copies, \$1.75.

### JOURNAL OF APPLIED PSYCHOLOGY

*Editor:* DONALD G. PATERSON, *University of Minnesota*. Contains material covering applications of psychology to business, industry, and education; bi-monthly.

Subscription: \$6.00 (Foreign \$6.50). Single copies, \$1.25.

### JOURNAL OF COMPARATIVE AND PHYSIOLOGICAL PSYCHOLOGY

*Editor:* HARRY F. HARLOW, *Department of the Army, Washington, D. C.* Contains original contributions in the field of comparative and physiological psychology; bi-monthly.

Subscription: \$7.00 (Foreign \$7.50). Single copies, \$1.25.

### JOURNAL OF CONSULTING PSYCHOLOGY

*Editor:* LAURANCE F. SHAFFER, *Teachers College, Columbia University*. Contains articles in the field of clinical and consulting psychology, counseling and guidance; bi-monthly.

Subscription: \$5.50 (Foreign \$6.00). Single copies, \$1.00.

### JOURNAL OF EXPERIMENTAL PSYCHOLOGY

*Editor:* ARTHUR W. MELTON, *U. S. Air Force, San Antonio, Texas*. Contains original contributions of an experimental character; monthly.

Subscription: \$14.00 (Foreign \$14.50). Single copies, \$1.25.

### PSYCHOLOGICAL ABSTRACTS

*Editor:* C. M. LOUTTIT, *University of Illinois*. Contains noncritical abstracts of the world's literature in psychology and related subjects; monthly.

Subscription: \$7.00 (Foreign \$7.50). Single copies, \$.75.

### PSYCHOLOGICAL BULLETIN

*Editor:* LYLE H. LANIER, *University of Illinois*. Contains critical reviews of psychological literature, methodological articles, book reviews, and discussions of controversial issues; bi-monthly.

Subscription: \$7.00 (Foreign \$7.50). Single copies, \$1.25.

### PSYCHOLOGICAL MONOGRAPHS: GENERAL AND APPLIED

*Editor:* HERBERT S. CONRAD, *U. S. Office of Education*. Contains longer researches and laboratory studies which appear as units; published at irregular intervals, about ten numbers per year.

Subscription: \$6.00 per volume (Foreign \$6.50). Single copies, price varies according to size.

### PSYCHOLOGICAL REVIEW

*Editor:* CARROLL C. PRATT, *Princeton University*. Contains original contributions of a theoretical nature; bi-monthly.

Subscription: \$5.00 (Foreign \$5.50). Single copies, \$1.00.





ROBERT R. SEARS

*Director, Laboratory of Human Development, Harvard University*

President of the American Psychological Association, 1951

President of the Division on Childhood and Adolescence

# A THEORETICAL FRAMEWORK FOR PERSONALITY AND SOCIAL BEHAVIOR<sup>1</sup>

ROBERT R. SEARS

*Harvard University*

I WISH to consider some systematic aspects of personality and social psychology, and to indicate what seem to me the directions further development of these fields is likely to take. Partly these directions are dictated by more general developments in psychology and the social sciences; but partly they are matters of choice, and of estimate as to what will provide us with the most effective science of human behavior.

Perhaps the most impressive thing about both these fields is the extent to which, in recent years, they have become empirical. The opinion poll, small group observational procedures, and attitude scales have contributed notably to the precision with which the actions of groups can be measured and their future behavior predicted. Similarly, in the field of personality and motivation, such devices as the TAT, doll play, behavior unit observations, and standardized interviews have become more and more effective for providing objective and quantified statements about significant variables.

From a practical standpoint, some of these methods have been extraordinarily valuable. Market surveys, studies of morale in the military services, diagnostic analyses of disturbed children, and comparative studies of techniques of teaching have yielded findings that have much improved the quality of human output. In effect, the past decade has put in the hands of any competent technician procedures which permit the empirical discovery of facts and principles that hitherto had been the province of so-called men of wisdom. For many areas of human action, intuitively skillful lucky guessing has given way to precise and replicable investigation.

## THEORY

This empirical progress has been accompanied by the construction of but a minimal amount of theory. Perhaps it could not have been otherwise.

<sup>1</sup> Address of the President of the American Psychological Association at Chicago, Illinois, September 3, 1951.

Theory does not grow in the absence of data, and until the last two decades, the data of social psychology have been meager and those of personality limited mainly to clinical observations.

Yet it is clear that further development in these fields will require an adequate theory. By a *theory* I mean a set of variables and the propositions that relate them to one another as antecedents and consequents. This involves such logical impedimenta as definitions, postulates, and theorems. And it requires the following of certain rules, such as that the definitions of variables must be mutually exclusive; that intervening variables must ultimately be reducible to operations; that the reference events specified as the consequents in theorems must be measured independently of the antecedents from which they are derived, and so on. The general procedure of theory construction is sufficiently standard that it needs no explication here.

The *findings* to be integrated are those that describe consistent relationships between behavior (or its products) and some other events. Essentially, these are the descriptive behavioral relationships that comprise the disciplines of individual and social psychology, sociology, and anthropology. Individual and group behavior are so inextricably intertwined, both as to cause and effect, that an adequate behavior theory must combine both in a single internally congruent system.

There are two main advantages of a good theory that make such a development urgent. First, it is economical in the sense that it permits many observed relationships to be subsumed under a single systematic proposition. And second, it permits the use of multiple variables and their relating principles, in combination, for the prediction of events.

These virtues have long been recognized. Several psychologists have constructed conceptual frameworks within which the facts of either social psychology or personality could be theoretically formulated. McDougall (11), Floyd Allport (1), and Kurt Lewin (10) provided them for social psychology;

Freud (5), G. V. Hamilton (6), Lewin (9), Gordon Allport (2), and H. A. Murray (13) have done the same for personality. Examples of the application of theory construction to problems important in social psychology and personality are to be found in Festinger's work on communication (4), Miller's studies of displacement (12), and our own analyses of the projective process in parent-child relationships (7, 17, 18).

#### ACTION

Every theory must have a subject-matter. It must be a theory about something, obviously. A certain class of events must be selected for explication. These are the reference events, the consequences for which antecedents are discovered. The basic events to which behavior theory has reference are *actions*. This follows from the very nature of our interest in man. It is his behavior, the things he does, the ends he accomplishes, that concern us.

From a logical standpoint, a theory is of value to the extent that it orders a set of observations. There are many kinds of observations that can be and have been made of social and individual behavior. Some of these have involved inferred traits or needs; others have related to perceptions or to states of consciousness. By the criterion of logic, a theory that takes any of these phenomena as its basic reference events is acceptable.

But there is another criterion to be considered, the practical one. It is reasonable to ask what kind of events are important to us. On this score, action is clearly more significant than perception or traits. The clinician must make judgments about personality that will permit predictions of behavior. Will the patient attempt suicide? Will his performance at intellectual tasks continue to deteriorate? Will his level of social problem-solving improve under an anxiety-reduction therapy? Likewise, the teacher and the parent undertake methods of rearing a child with expectations that his actions will change in a particular direction. They want him to add more accurately, or paint more freely, or cry less violently when he is disappointed; even those changes commonly interpreted as perceptual, such as art or music appreciation, are evidenced in the form of choices as to where to go, what to look at, what to listen to.

The situation is even clearer with respect to social behavior. The social engineer is concerned with such questions as whether a certain parent-child

relationship will establish habitually dependent behavior in the child, whether the eventual marriage of a courting couple will terminate in divorce or in the social facilitation of their mutual labors, whether citizens will buy bonds or vote for a Congressman, whether a group will be shattered or solidified by external opposition, i.e., whether there will be an increase or decrease in cooperative efforts and in-group aggression.

Aside from the fact that a behavior science, rather than a *need* or *perceptual* science, is of the greatest use to us, there is an evident practical advantage. Human beings deal with one another in terms of actions. The teacher has direct observation of the performance of her pupils. The parent or the husband or the foreman or the Congressman can have only inferential knowledge of the ideas or desires of those with whom he interacts. But he can describe the conditions that impinge on people and he can take note of the behavioral consequences. To put the argument briefly: actions are the events of most importance, and actions are most available to observation and measurement.

This is not to say that needs or motives, perceptions, traits, and other such internalized structures or processes are irrelevant. Any scientific system must contain both operational and intervening variables that are independent of the reference events forming the subject-matter of the system. But the choosing of such variables must depend on their contribution to a theory that will predict actions. There is no virtue in a descriptive statement that a person or a class of persons possesses such and such a trait or need unless that statement is part of a larger one that concludes with a specification of a kind of action to be performed. To describe a person as having *high emotionality* or *low sensitivity* or *diffuse anxiety* is systematically acceptable only if other variables are added that will, together with these internal personal properties, specify what kind of behavior can be expected from him under some specific circumstances.

#### DYNAMICS

By definition a theory of action is dynamic; i.e., it has to do with force or energy in motion. The term *dynamic* has been so abused by psychologists during the last half century, however, that its meaning is no longer clear. Perhaps it never was. But with successive "dynamic psychologies"—those of Freud, Morton Prince, Woodworth, Lewin, and a



host of contemporary theorists—its meaning has been more obfuscated than ever. Sometimes it refers to a motivational approach, sometimes to a developmental, sometimes to an emphasis on unconscious processes. Mostly, I suspect, it merely means the theorist is revolting against what seem to him the stultifying, structuralistic, unhuman inadequacies of his predecessors. It boils down to a self-attributed accolade for virtue, a promise to deal with important characteristics of real live people rather than dry and dusty processes.

This is a waste of a good word. By no means all modern psychological systems are dynamic; some are trait-based and some are need-based. No one would deny that combinations of habit structures do exist and do provide a kind of integrated consistency in a person's behavior. Likewise, no one would attempt to order the events of human action without variables that relate to motivation, including those kinds of motivation that cannot be verbally reported by the person himself. But there is more to dynamics than motivation. There is *change*.

Changes in behavior are of two kinds. For a theory to be dynamic, both must be systematized, separately but congruently. One is ongoing action, or *performance*, and the other is learning, or *acquisition*. Obviously, no predictive statement can be made about ongoing action unless certain things are known about the person's *potentialities for action*. He has certain properties that determine what kind of behavior he will produce under any given set of circumstances. His motivation is weak or strong, he is frustrated or not in various goal-directed sequences, he has expectancies of the consequences of his behavior. Unless these are known, it is impossible to have any systematization of ongoing action. And unless the *changes* in potentialities for action are systematically ordered, there is no possibility of constructing an ongoing action theory that will enable one to predict beyond the termination of any single sequence of behavior.

The combining of these two approaches to behavior has not yet been fully accomplished. The most elaborate theory of performance, or ongoing action, is that of Kurt Lewin (9), but his field theory has never been developed to care adequately for problems of personality development (learning). Similarly, the developmental theory of G. V. Hamilton (6) gave an excellent account of the acquisition

of potentialities for response but did not cover so effectively the problems of ongoing action.<sup>2</sup>

#### MONADIC AND DIADIC UNITS

I have already made reference to the desirability of combining individual and social behavior into a single theoretical system. The reasons are obvious. In any social interaction, the interests, motives, habits or other psychological properties of the acting individuals determine to some degree the kind of interaction that will occur. The shy youngster is likely to have less stimulating learning experiences with his teacher than is a bolder one; the traveller in a foreign land who knows the language forms different kinds of friendships than the one who uses an interpreter. Conversely, the social milieu, the interpersonal relationships, within which a person acts determine his psychological properties. A man in a subordinate role cannot act as a leader; a child reared as the younger of two develops differently from one reared as the elder of two. Whether the group's behavior is dealt with as antecedent and the individual's as consequent, or vice versa, the two kinds of event are so commonly mixed in causal relationships that it is impractical to conceptualize them separately.

To wish for a combining theoretical framework is one thing, but to get it from psychologists is quite another. Sociologists have been more accustomed to think in such terms. The theoretical analyses of Cottrell (3) and of Parsons (15) have emphasized particularly the interactive processes. Among psychologists, Newcomb (14), with his exposition of role expectancy, and Festinger (4), in his studies of group cohesiveness, clearly exemplify the trend toward combination. In the main, however, in spite of their long prepossession with social influences on the individual, psychologists think monadically. That is, they choose the behavior of one person as their scientific subject matter. For them, the uni-

<sup>2</sup> A simple behavior sequence is shown in Figure 1. The various potentialities for action are specified by  $S_D$  (motivation) and  $S_{cog}$  (cognitive structures). In large part these characteristics are a product of learning. The successful completion of a behavior sequence is a reinforcement, and this modifies the drives and habit structures of the person in certain lawful ways, these laws being part of the body of the laws of learning. In other words, there is a change in the person's potentialities for action. It is to be noted, therefore, that although Figure 1 describes a single behavior sequence, there are two ways of ordering the events that compose it. Both refer to changes, to energy in motion. To be dynamic, a theory of behavior must encompass both.



verse is composed of individuals. These individuals are acted upon by external events, to be sure, and in turn the external world is modified by the individuals' behaviors. But the universal laws sought by the psychologist almost always relate to a single body. They are monadic laws, and they are stated with reference to a monadic unit of behavior.

The main variables that compose such systems have been presented diagrammatically in many ways. Some are so well known as virtually to represent signatures for the theorists who devised them. There are Tolman's schematic sow-bug, Hull's behavior sequence, Lewin's field structure, and Miller and Dollard's learning paradigm. These diagrams differ considerably in the kinds of variables they incorporate. Some emphasize reward and reinforcement; others do not. Some are time-oriented; others are descriptive of a non-temporal force field. All specify antecedent stimulus conditions and consequent actions, but in very different ways and with quite different systematic constructs. But there is one thing in common among them—they are all monadic.

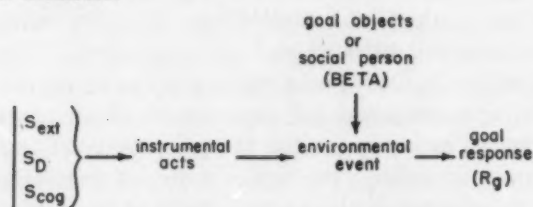


FIG. 1. The monadic instigation-action sequence

But if personality and social behavior are to be included in a single theory, the basic monadic unit of behavior must be expandable into a diadic one. A diadic unit is one that describes the combined actions of two or more persons.<sup>3</sup> A diadic unit is essential if there is to be any conceptualization of the *relationships* between people, as in the parent-child, teacher-pupil, husband-wife, or leader-follower instances. To have a science of interactive events, one must have variables and units of action that refer to such events. While it is possible to systematize some observations about individuals by using monadic units, the fact is that a large proportion of the properties of a person that compose his personality are originally formed in diadic situations and are measurable only by reference to diadic

<sup>3</sup> Although the prefix means "two," the term is used here simply as the minimal instance of multiplicity. Similar principles would hold whether the interactors were two or more.

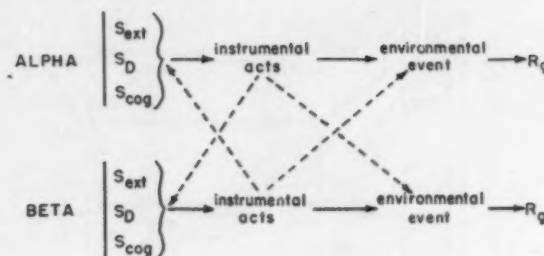


FIG. 2. The diadic sequence

situations or symbolic representations of them. Thus, even a monadic description of a person's action makes use of diadic variables in the form of social stimuli.

This is exemplified in Figure 1, a diagram of a monadic behavior sequence that, as will be seen, can be expanded into a diadic sequence. One aspect of this figure deserves comment, the *environmental event*. This concept refers to the changes produced in the environment by the instrumental activity; these are the changes necessary for the occurrence of the goal response. The teacher trying to increase participatory activity in a class of children, for example, gets her reward when the youngsters spontaneously start a team game at recess. She makes her goal response—she has achieved her aim—when the environment changes, i.e., when the children play a team game. Or a boy is seeking approbation from his father; he hits a three-bagger; his father grins with satisfaction. The grin is the boy's environmental event in his monadically conceived action sequence.

This concept achieves importance in the present context, because it is the necessary connecting link between a monadic and diadic systematization of behavior. The framework for such a description is shown in Figure 2. For convenience the two persons are labelled Alpha and Beta. A diadic situation exists whenever the actions of Beta produce the environmental events for Alpha, and vice versa. The behavior of each person is essential to the other's successful completion of his goal directed sequence of action. The drives of each are satisfied only when the motivated actions of the other are carried through to completion. The nurturant mother is satisfied by the fully-loved child's expression of satiety, and the child is satisfied by the expressions of nurturance given by his mother.

It must be made clear in this connection that environmental events are *only those changes in*

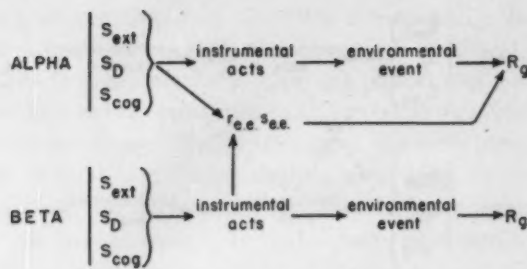


FIG. 3. The diadic sequence with anticipatory responses to the environmental event

environment produced by the behavior of the person under consideration. The stroke of lightning that splits a log for the tired woodcutter is not in this category, nor is the food given the newborn infant by his mother, nor the empty taxi that providentially appears when the rain is at its worst. These are certainly characteristics of the environment, manipulanda that govern in some ways the future behavior of Alpha, but they are not environmental events in the sense that the term is used here. They were not induced by any action of Alpha.

This is an important distinction. Unless the interaction of Alpha and Beta is based on something other than the fortuitously useful conjunction of their individual actions, there is no interdependence of each on the other. There is, in effect, no diadic system, only a piling up of parallel monadic sequences.

The factor responsible for maintaining stability of the diadic unit is exhibited in Figure 3. It is the *expectancy* of the environmental event, diagrammed in a notation similar to that used by Hull for the anticipatory goal response (8). In the present case, the anticipatory response is a fractional part of the reactions Alpha makes to those behaviors of Beta that constitute the environmental event. For example, if a child wants to be kissed good-night, his mother must lean toward him affectionately and kiss him. He, in turn, must slip his arms around her neck and lift his face to hers receptively. These latter movements are the ones that fractionate and become anticipatory in Alpha's behavior sequence. And as in the case of the anticipatory goal response, they elicit response-produced stimuli ( $r_{ee} s_{ee}$ ) that become integrated into the total stimulus constellation which serves to instigate this behavior sequence on future occasions.

These anticipatory reactions to Beta's behavior

are the *expectancies* that make the behavior of the two people truly interdependent. They provide the mechanism, at least within the framework of one conceptualization of the learning process, by which a diadic behavior unit can be derived from the combining of two or more monadic units.

One can only speculate as to what variables, and what general principles, will eventually compose a diadic behavior theory. Some of them will probably be discovered in the attempt to analyze those psychological processes that apparently result from highly particularized constellations of interpersonal relations. Identification is one such process. Reciprocal cathexis is another. A third is the process of secondary drive formation, as in the early childhood development of aggression and dependency. Other variables will likely be devised in the study of small groups. Festinger's concept of cohesiveness is a big step forward in this direction.

One way of approaching the problem would be to examine the various possibilities of reward and nonreward or punishment for Alpha and Beta. If a diad exists on the basis of reciprocal rewards, as in the mother-child relationship, there are nevertheless possibilities of mutual interference. That is, while the diad is held together by powerful continuing motivations and expectancies of reciprocal support, each member has the potentiality of frustrating the other. One major source of frustration is the absence of the partner, Beta, at times when Alpha needs him. Such absences would be expected to occur partly (but by no means entirely, of course) because Beta was also the partner in diadic relationships with other people. Now, since in young children aggression and dependency are two of the major reactions to frustration, one might reach some such hypothesis as this: that the amount of aggression and dependency that characterize a mother-child interaction will be a positive function of the number of diadic relationships in which each is a member. Or to put it in a more testable form: everything else being held constant, a child's dependency and aggressiveness toward his mother will vary with the amount of role conflict the mother has.

#### PERSONALITY

In this monadic-diadic framework, personality is a description of those properties of a person that specify his potentialities for action. Such a description must include reference to motivation, expecta-

tions, habit structure, the nature of the instigators that activate instrumental behavior, and the kinds of environmental events that such actions will produce. Furthermore, all these factors must be described in terms of the diadic aspects of the behavior that occurs. That is, the kinds of Betas who can serve as instigators for particular responses must be specified, and the environmental events that Beta creates for Alpha must be described not only as they fit into Alpha's activity but also as they fit into the whole motivational sequence of Beta.

In behavior science, personality is sometimes treated as antecedent and sometimes as consequent. As antecedent, it is part of the total matrix that must be known in order to account for either individual or diadic action. In recent years various approaches to personality have too much depended on assumptions of fixed traits and fixed needs. This has led to measurement procedures that do not include reference to the social stimulus conditions under which the traits or needs will be expressed. As Fillmore Sanford has said, in connection with a study of leadership, there is no trait independent of the conditions that elicit it. Leadership is a quality in a person's behavior only if there are followers who react to him as a leader. Most behavior with which the personality psychologist is concerned is either directly diadic or is in response to symbolic representation of the diad. Therefore, any conceptualization of the person's properties must be done with consideration of the properties of the various Betas with whom Alpha is interactive.

A simple example of the measurement problem created by these considerations arose in connection with some data on aggressive behavior collected in our laboratory (7, 17, 18). Forty preschool children were the subjects. Two main measures of aggressiveness were secured. One was overt and socially directed aggression. This measure was obtained both by teachers' rating scales and by direct observation. The other was projective or fantasy aggression displayed in doll play. By a fixed trait or need assumption, one would expect these two measures to correspond somewhat. They did—somewhat! The correlation was  $+0.13$ !

An analysis in terms of learning and action makes the meaning of this relationship clear. These children's mothers were interviewed concerning their methods of handling the youngsters' aggression at home. On the basis of this information it was possible to divide the children into three subgroups

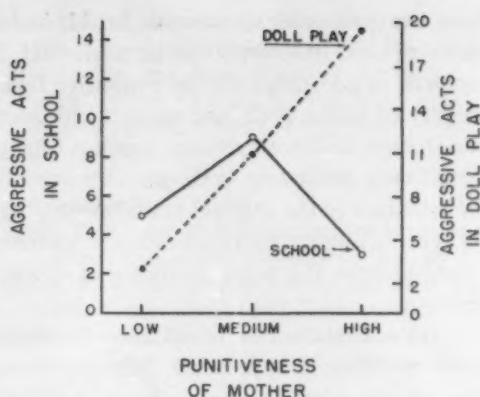


FIG. 4. Relation of interpersonal and fantasy aggression to maternal punitiveness. Interpersonal aggression is measured by frequency of aggressive acts occurring during four hours of observation in preschool; fantasy aggression is measured by mean frequency of aggressive acts occurring during two twenty minute doll play sessions. Punitiveness of mother is based on ratings of interview material concerning severity of mother's punishment of child's aggressive acts at home. Charted values are medians of the three groups, sizes of which are: Low = 7, Medium = 23, High = 10.

which had had different degrees of severity of punishment for aggression.

In Figure 4, the median frequency of both overt and fantasy aggression are shown for these three subgroups. It is to be noted that while the "mild" and "moderate" groups show a correspondence in amount of aggressive behavior of the two kinds, there is a radical disagreement in the "severe" punishment subgroup. These latter children, on the average, behaved rather non-aggressively in preschool, but in their doll play fantasies there was an abundance of aggression. One could ask whether these children are very aggressive or very non-aggressive. Do they have strong need for aggression or weak?

Even if these questions could be sensibly answered, which they cannot, the answers would be of little help in predicting the future aggressive behavior of these children. To accomplish the latter, which is our aim, there must be an analysis of the social stimulus conditions under which the future behavior is to be observed.

The minimum specification would be as to whether the behavior would be observed in a nursery school or in a permissive doll play experiment. With a conceptualization of the diadic variables involved, however, it is possible to make a statement that goes beyond the narrow confines



of these two measuring situations. In this instance, the more general statements can be made that, first, the amount of aggression will be a negative function of severity of punishment, and second, with severity of punishment held constant, the amount of aggression will vary positively with dissimilarity of the diadic situation to the original punishment situation in the home. These are strictly monadic statements, but they assume the prior existence of diadic experiences.

The systematization of personality development requires a different approach. When personality factors are considered as antecedents to individual or group behavior, the laws of ongoing action are involved. But when personality development is the matter for study, the laws of learning are the bases. What is needed in this case is a set of principles that will describe the way in which the child's potentialities for action—that is, his drives, habits, cognitive structures, and expectancies—are changed by the experiences he has throughout his life.

This is a difficult problem, both logically and empirically. Personality is partly the product of a life-time of diadic action which has modified the individual's potentiality for further action. The changed potentiality is therefore partly a product of his own actions. For example, in the data concerning child aggression and severity of maternal punishment for aggression, the mother's action in punishing the child were doubtless influenced in part by the amount and kind of aggression exhibited toward her by the child. Thus, the behavior that served as an antecedent to the differential display of overt and fantasy aggression by the child was contributed to by the child himself.

Logically, and practically, a good theory requires that antecedents and consequents be entirely independent of one another. It would be most satisfactory if the child did not influence the mother's behavior, and if we could then say something about the effect of severity of punishment on later behavior. One solution to this problem appears to be a careful measurement of the child's contribution to the diadic relationship and a partialling out of that influence in the comparison of antecedent mother behavior with consequent child behavior.

The variables that appear most promising in the study of personality development come from two main sources. One is the set of definitions and postulates that compose the laws of learning.

Whether the particular formulations used by Tolman, Hull, Guthrie, or Skinner are selected seems of little importance at the moment. Those of Hull and Tolman have certain *a priori* advantages, but the main point is the use of whatever laws of learning will best serve to account for changes in potentiality for action. The theoretical formulation of the research in our own laboratory stems from Hull through Miller and Dollard.

The second source of variables lies in the conceptualization of those secondary motivational systems that arise universally as a product of the diadic relationship between mother and child (16). These include aggression, dependency, self-reliance, responsibility, the anxieties, competition, and status-seeking, as well as the various consequences of the training inherent in socialization of the primary drives of hunger, sex, fatigue, and elimination. The exact forms of behavior potentiality created in each of these motivational areas are different from child to child and culture to culture. But the biological nature of man, coupled with his universal gregariousness, gives rise to various learning experiences that every human child endures in one fashion or another.

#### SUMMARY

In sum, it seems to me that the most promising directions now discernible in the study of social behavior and personality require a theory that has the following properties: its basic reference events must be *actions*; it must combine congruently both *diadic* and *monadic* events; it must account for both *ongoing action* and *learning*; it must provide a description of personality couched in terms of *potentiality for action*; and it must provide principles of personality development in terms of *changes in potentiality for action*.

#### REFERENCES

1. ALLPORT, F. H. *Social psychology*. Boston: Houghton, Mifflin Co., 1924.
2. ALLPORT, G. W. *Personality; a psychological interpretation*. New York: Henry Holt, 1937.
3. COTTRELL, L. S. The analysis of situational fields in social psychology. *Amer. Sociol. Rev.*, 1942, 7, 370-382.
4. FESTINGER, L. Informal social communication. In, L. Festinger et al. *Theory and experiment in social communication*. Ann. Arbor: Research Center for Group Dynamics, 1950.



5. FREUD, S. *General introduction to psychoanalysis*. New York: Boni & Liveright, 1920.
6. HAMILTON, G. V. *Objective psychopathology*. St. Louis: C. V. Mosby, 1925.
7. HOLLENBERG, E., AND SPERRY, M. Some antecedents of aggression and effects of frustration in doll play. *Personality*, 1951, 1, 32-43.
8. HULL, C. L. Goal attraction and directing ideas conceived as habit phenomena. *Psychol. Rev.*, 1931, 38, 487-506.
9. LEWIN, K. *A dynamic theory of personality*. New York: McGraw-Hill, 1935.
10. LEWIN, K. Constructs in psychology and psychological ecology. *Univ. Ia. Stud. Child Welf.*, 1944, 20, 1-29.
11. McDUGALL, W. *An introduction to social psychology*. London: Methuen, 1908.
12. MILLER, N. E. Theory and experiment relating psychoanalytic displacement to stimulus-response generalization. *J. abn. soc. psychol.*, 1948, 43, 155-178.
13. MURRAY, H. A. *Explorations in personality*. New York: Oxford Univ. Press, 1938.
14. NEWCOMB, T. M. *Social psychology*. New York: Dryden Press, 1950.
15. PARSONS, T. *The social system*. Glencoe, Illinois: The Free Press, 1951.
16. SEARS, R. R. Personality development in contemporary culture. *Proc. Amer. Philos. Soc.*, 1948, 92, 363-370.
17. SEARS, R. R. Relation of fantasy aggression to interpersonal aggression. *Child Developm.*, 1950, 21, 5-6.
18. SEARS, R. R. Effects of frustration and anxiety on fantasy aggression. *Amer. J. Orthopsychiat.*, 1951, 21, July.

*Manuscript received July 12, 1951*

# PROCEEDINGS OF THE FORTY-THIRD ANNUAL MEETING OF THE SOUTHERN SOCIETY FOR PHILOSOPHY AND PSYCHOLOGY

D. MAURICE ALLAN, *Secretary*

*Hampden-Sydney College*

THE forty-third annual meeting of the Southern Society for Philosophy and Psychology was held at Roanoke, Virginia, March 22-24, 1951. All section and business meetings were held in the Hotel Roanoke. Hollins College, Roanoke College, and Washington and Lee University were the host institutions. Local arrangements were under the direction of Dr. William M. Hinton. The Program Committee consisted of Dr. Oliver L. Lacey, Dean Marten ten Hoor and Dr. D. Maurice Allan, Chairman.

The Council of the Society met on the evening of March 22. President Lewis M. Hammond was in the chair. Members present were D. Maurice Allan, Elizabeth Duffy, Stanford C. Ericksen, Richard H. Henneman, Gerard Hinrichs, Louis O. Kattsoff, Willis Moore, and Herbert C. Sanborn.

Open meetings began Thursday evening with a Case Conference at the Veterans Administration Hospital and a showing of recent psychological films in the Pine Room of the Hotel Roanoke. Four sessions in philosophy, six sessions in psychology, and a symposium on Learning Theory were held on Friday. On Saturday morning, at the joint session, there was a symposium on Cybernetics and Theories of Mind, presided over by Frank A. Geldard. Chairmen of the philosophy sections were A. G. A. Balz, John R. Everett, B. C. Holtzclaw, and John Kuiper. Chairmen of the psychology sessions were R. B. Ammons, Hulsey Cason, E. E. Cureton, K. M. Dallenbach, J. F. Dashiell, Frank W. Finger, and Joseph E. Moore. The Case Conference was presided over by Louis E. Cohen.

The Society's annual banquet was held Friday evening in the Ball Room of the Hotel Roanoke. Dr. Lewis M. Hammond delivered the presidential address which was entitled "Learning and Self-Government."

## MINUTES OF THE ANNUAL BUSINESS MEETING

President Hammond called the meeting to order at 11 A.M. Saturday morning. The minutes of the Forty-Second Annual Business Meeting were approved. The reports of the Secretary and Treasurer were read and approved.

Dr. Willis Moore presented the report of a sub-committee of the Council in relation to a proposal concerning academic freedom submitted by the Advisory Standing Committee. The sub-committee, consisting of Stanford C. Ericksen, Gerard Hinrichs, and Willis Moore, Chairman, offered the following motion which was carried.

It is proposed that the Southern Society for Philosophy and Psychology approach the American Association of University Professors with the recommendation that the Association attempt to secure the concurrence of a substantial number of learned societies in a statement of the principle of academic freedom and related topics.

Dr. Albert G. A. Balz presented his report as delegate to the last meeting of the Southern Humanities Conference. Included in this report was the announcement that a history of the Society had been prepared by the collaborative efforts of Dr. Balz and Dr. Herbert C. Sanborn and that this is published in a bulletin of the Southern Humanities Conference. By action of the Council, Dr. Balz was re-appointed as the Society's delegate.

The following amendment to the Constitution, presented at the 1950 Business Meeting, was carried by a unanimous vote:

Strike out the second sentence in Article III, Section 4, and for it substitute the following:

The Council shall circularize the entire membership of the Society at the time of the call for papers requesting suggestions of names of persons to be put into nomination for vacant offices. In alternate years, the name of a philosopher, and in the intervening

years, the name of a psychologist shall be called for President; and for Council vacancies, the name of one philosopher and one psychologist shall be called for. For each office, the Council shall put into nomination the name most frequently suggested by the membership together with one additional name chosen by the Council.

The first sentence of the present Article III, Section 4 shall stand as the first sentence of the amended section.

A proposal by Dr. J. N. Phillips that a committee be established to receive suggestions for the implementation of the principle of academic freedom and also to receive reports of violations was referred to the Advisory Standing Committee. Dr. William McGehee gave a report of the recommendations of the American Psychological Association Committee on intraprofessional relationships in psychology.

On recommendation of the Council four new associate members and thirty seven members were elected to the Society. The associate members are: Edward John Morrison, Howard Reuben, Carl Edwin Sherrick, Jr., and Jack Allen Vernon.

The full members are: Theron Alexander, Martin Joseph Brennan, Richard Leslie Barber, Jerry Williams Carter, Jr., John Theodore Cocutz, H. Lamar Crosby, Jr., Bradford Dunham, C. Franklin Eicher, Betsy Worth Estes, John Rutherford Everett, Ernest

Furchtgott, Richard Marion Griffith, Williams Norwood Hicks, Ralph Thompson Hinton, George Krzywicki, Victor Lowe, Woodrow Wilson Mackey, Erland N. P. Nelson, H. Sherman Oberly, Robert Travis Osborne, George Frederick Parker, Howard Lee Parsons, George Edward Passey, William Hardman Poteat, Ralph William Queal, Jr., Gilbert J. Rich, Arthur Jean Riopelle, Morris Roseman, Hirsch Lazaar Silverman, George Spache, Ethel Tilley, William Gipsy Toland, Henry Weitz, Charles Hart Westbrook, Wilson F. Wetzler, Stanley Burd Williams, and Henry Wunderlich.

The following officers and Council members were unanimously elected by the Society: President, John B. Wolfe; Treasurer, William M. Hinton; Council members, Willis Moore, Edward G. Ballard, and Karl M. Dallenbach. D. Maurice Allan continues as Secretary. Dr. Elizabeth Duffy was appointed to the Advisory Standing Committee.

It was moved and carried that the Society accept the invitation of the University of Tennessee to hold the next annual meeting in Knoxville, Tennessee.

The Society unanimously recorded its gratitude to Hollins College, Roanoke College, and Washington and Lee University, and the Hotel Roanoke for their hospitality. The meeting was then adjourned.

## PROGRAM

### Thursday Evening

#### Case Conference at VA Hospital, Roanoke

The team approach to psychiatric treatment demonstrated in the case of a veteran patient.

LOUIS D. COHEN, Chairman

### Friday Morning

#### Philosophy Section 1: Logic and Methodology

B. C. HOLTZCLAW, Chairman

The false notion of logical constants. HAROLD N. LEE, *Newcomb College*.

A semi-statistical approach to a problem in aesthetics. LAURENCE J. LAFLEUR, *Florida State University*.

Fact, phenomena, frames of reference in psychology. L. O. KATTSOFF, *University of North Carolina*.

Is there a problem of induction? PETER A. CARMICHAEL, *Louisiana State University*.

The contrary-to-fact conditional. B. DUNHAM, *Duke University*.

Explication and definition. RUBIN GOTESKY, *University of Georgia*.

#### Philosophy Section 2: History of Philosophy; Place of Philosophy In Education

JOHN R. EVERETT, Chairman

The function of history in liberal education, HERBERT C. SANBORN, *Vanderbilt University*.

Plato's view that art expresses beauty. CONSTANTINE CAVARNOS, *University of North Carolina*.

Humanism in the philosophy of Nicholas of Cusa. ANN FORBES LIDDELL, *Florida State University*.

Philosophy in the four year civilization course at Coker college. DONALD C. AGNEW, *Coker College*.



The idea-numbers of Plato. ROBERT D. MILLER, *Florida State University*.

Towards a definition of education. CARL H. HAMBURG, *Tulane University*.

#### Friday Morning

#### Psychology Section A: Applied

JOSEPH E. MOORE, Chairman

An exploratory investigation of visual symbols for the presentation of information. RICHARD H. HENNEMAN, *University of Virginia*.

An investigation of the cues underlying the intelligibility of speech. W. D. GARVEY, *University of Virginia*.

Some problems of studying rhythm. JOSEPH WEITZ, *Life Insurance Agency Management Association*.

Design of experiment: speed and accuracy of dial reading as a function of their pattern arrangement and linear separation. JOHN S. HOWLAND, *Vanderbilt University*.

Is there a significant difference in the mental ability of industrial applicants and veterans seeking advisement? JOSEPH E. MOORE and L. W. ROSS, *Georgia Institute of Technology*.

The problem area of educational toy design. KENNETH E. MOYER and B. VON HALLER GILMER, *Carnegie Institute of Technology*.

A paper and pencil test for the selection of pilots and drivers. LOH SENG TSAI, *Tulane University*.

The predictive value of two easy practice tests. SCARVIA B. ANDERSON and JULIAN C. STANLEY, *George Peabody College for Teachers*.

Attitudes of different occupational groups toward socialized medicine. K. L. BARKLEY, T. W. LAUDERDALE, C. R. MILTON, H. H. ROACH, and VARA SMITH, *North Carolina State College*.

#### Psychology Section B: Sensation and Perception

K. M. DALLENBACH, Chairman

Muller-Lyer illusion of the blind. T. T. GILLEN and L. S. TSAI, *Tulane University*.

Simultaneous vibratory and electrical stimulation of the skin. JACK A. VERNON, *University of Virginia*.

Sound localization during rotation of the visual environment. MALCOLM D. ARNOULT, *Human*

*Resources Research Center, Lackland Air Force Base*.

On the binocular mixture of red and green light. JOHN P. NAFE, *Washington University*.

The distribution with age of the sense organs of taste. KARL M. DALLENBACH, *University of Texas*.

The constricting role of value in psychophysical systems. WILLIAM BEVAN, JR., and WILLIAM F. DUKES, *Emory University*.

#### Psychology Section C: Personality and Social

HULSEY CASON, Chairman

Effect of group size on leaderless discussion behavior and ratings. FAY-TYLER M. NORTON and BERNARD M. BASS, *Louisiana State University*.

Discussion and external leadership status related to roles played in initially leaderless group discussions. BERNARD M. BASS, *Louisiana State University*.

Projection as a function of racial antagonism. HERBERT W. EBER, *Southwestern-at-Memphis*.

Sex differences on Spranger's types. SUSAN W. GRAY and JULIAN C. STANLEY, JR., *George Peabody College for Teachers*.

Self-insight on Spranger's value types. JULIAN C. STANLEY, JR., and SUSAN W. GRAY, *George Peabody College for Teachers*.

A comparative study of the felt problems of students in two Southern women's colleges. DOROTHY G. PARK, *Meredith College*.

Rural-urban differences in the responses of college freshmen to an adjustment inventory. R. T. OSBORNE, JAMES E. GREENE, and WILMA B. SANDERS, *University of Georgia*.

The evidence for ESP displacement and its relation to the unconsciousness of ESP. J. G. PRATT, *Duke University*.

A study of the relationship between temperament of thoroughbred broodmares and performance of offspring. BETSY W. ESTES, *University of Kentucky*.

#### Symposium on Learning Theory

FRANK W. FINGER, Chairman

Participants: HARRY HARLOW, L. STARLING REID, and STANLEY B. WILLIAMS.



## Friday Afternoon

## Philosophy Section 3: Theory of Knowledge and Meaning

JOHN KUIPER, Chairman

Adversaries as defenders of Cartesian reason. MARJORIE S. HARRIS, *Randolph-Macon Woman's College*.

The room next door: a realistic addition to the pragmatic analysis of belief in unobserved reality. VICTOR LOWE, *Johns Hopkins University*.

A pragmatic conception of objectivity. RICHARD B. ANGELL, *Florida State University*.

A psychological theory of symbolism. H. M. JOHNSON, *Tulane University*.

Reason and convention. EDWARD G. BALLARD, *Tulane University*.

A critique of realism. LAUCHLIN D. MACDONALD, *University of Mississippi*.

## Philosophy Section 4: Ethics and Value Theory

A. G. A. BALZ, Chairman

Farewell to religious prejudice. QUINTER M. LYON, *University of Mississippi*.

The confirmation of value judgments. CHARLES A. BAYLIS, *University of Maryland*.

The first principle of naturalistic value theory. HOWARD L. PARSONS, *University of Tennessee*.

Ethics and Dewey's theory of inquiry. PAUL WELSH, *Duke University*.

The sociology of knowledge and ethics. WARREN ASHBY, *Woman's College of the University of North Carolina*.

Footnotes to freedom. EDGAR H. HENDERSON, *Florida State University*.

The meaning and knowledge-status of freedom. GERARD HINRICHS, *Madison, Wisconsin*.

## Psychology Section D: General

E. E. CURETON, Chairman

A point of view upon theory and practice in psychology. VIRGIL S. WARD, *Wofford College*.

Degrees of co-variant perfection. HENRY F. DICKENSON, *Lincoln Memorial University*.

Research in psychophysiology, sponsored by the Office of Naval Research. HENRY A. IMUS, *Office of Naval Research, Washington, D. C.*

Reliability of a set of averages of unequal numbers of scores. EDWARD E. CURETON, *University of Tennessee*.

A frequency analysis of human motor behavior. R. W. QUEAL, JR., *University of Virginia*.

An affix test. HULSEY CASON, *University of Miami*.

## Psychology Section E: Learning

J. F. DASHIELL, Chairman

Further experiments on the effects of extirpation of parastriate and temporal cortex on visual discriminations in Rhesus monkeys. ARTHUR J. RIOPELLE and HARLOW W. ADES, *Emory University*.

The effect of number of reinforcements on the relative strength of place-and-response-dispositions. LEE S. CALDWELL, *University of Kentucky*.

Sensory pre-conditioning in the rat. HARRY W. KARN and KENWOOD L. FAIR, *Carnegie Institute of Technology*.

Effects of accuracy of movement and distribution of practice on linear pursuit. C. D. CRITES and R. B. AMMONS, *University of Louisville*.

The transfer of discrimination training to a different instrumental response situation. HOWARD REUBEN, *University of Virginia*.

Generalization of secondary reinforcement to a different drive as measured by trials to extinction. ALEC J. SLIVINSKE, *University of Virginia*.

An organizing procedure in rote memorizing. JOHN F. DASHIELL, *University of North Carolina*.

A three-factor theory of inhibition: an addition to Hull's two-factor theory. ABRAM AMSEL, *Tulane University*.

Resumption of interrupted versus completed feeding activities in albino rats. DAVID SPERLING and JAMES CALVIN, *University of Kentucky*.

## Psychology Section F: Abnormal and Clinical

R. B. AMMONS, Chairman

MMPI correlates of somnambulisms. RICHARD M. GRIFFITH, *VA Hospital, Lexington, Kentucky and University of Kentucky*.

Effect of experimentally produced anxiety on Wechsler-Bellevue subtests. C. H. AMSTER and C. H. AMMONS, *University of Louisville*.

Differential flexibility in normal and neuropsychiatric subjects on a test of closure behavior. MORRIS ROSEMAN, *VA Hospital, Lexington, Kentucky*.

Relation of accuracy and confidence of perceiving to Rorschach test performance. JAMES S. CALVIN, *University of Kentucky*.

The concept of security. C. F. EICHER, *Woman's College, University of North Carolina*.

A new technique for observing concept formation. MELVIN R. MARKS and CHARLES K. RAMOND, *Tulane University and University of Iowa*.

The homonym word association technique. PAUL F. SECORD, *Emory University*.

A projective free association test. CHARLES D. RAY, *University of Miami*.

#### Friday Evening

#### Annual Banquet

Presidential Address: Learning and self-government. LEWIS M. HAMMOND, *University of Virginia*.

#### Saturday Morning

#### Joint Session

#### Symposium: Cybernetics and Theories of Mind

FRANK A. GELDARD, Chairman

DOUGLAS G. ELLSON, *Indiana University* (representing psychology).

RICHARD H. HENNEMANN, *University of Virginia*. Discussion of Professor Ellson's paper.

GLENN R. NEGLEY, *Duke University* (representing philosophy).

WILLIS MOORE, *University of Tennessee*. Discussion of Professor Negley's paper.

General Discussion.

#### Council

M. E. Bunch, Elizabeth Duffy, James H. Elder, Stanford C. Ericksen, Gerard Hinrichs, Louis Kattsoff, Willis Moore, Herbert C. Sanborn (Honorary Member for Life), and officers.

*Manuscript received April 6, 1951*

# PROCEEDINGS OF THE THIRTY-FIRST ANNUAL MEETING OF THE WESTERN PSYCHOLOGICAL ASSOCIATION

BRANT CLARK, *Secretary*

*San Jose State College*

THE thirty-first annual meeting of the Western Psychological Association was held in the Civic Auditorium, San Jose, California, April 27-28, 1951. Ninety-six papers were read in eleven section meetings and there were two symposia. The address of welcome was given by T. W. MacQuarrie, president of San Jose State College. The registered attendance of 576 was the largest in the history of the organization. C. W. Telford was chairman of the committee on local arrangements.

Maud A. Merrill delivered the presidential address, "Oscillation and Progress in Clinical Psychology," at the annual banquet which was attended by 238 members and guests. Lewis M. Terman

who was the first president of the Western Psychological Association acted as toastmaster.

The following officers were elected for 1951-1952 at the annual business meeting: president, Robert W. Leeper, University of Oregon; vice-president, Quinn McNemar, Stanford University; secretary, Brant Clark, San Jose State College; treasurer, Rheem F. Jarrett, University of California, Berkeley. Since the meeting Brant Clark has been recalled to active naval service and Richard W. Kilby of San Jose State College has been selected by the executive committee to act as secretary for the ensuing year.

The Association accepted the invitation of Fresno State College to hold its 1952 meeting in Fresno on April 25-26.

## PROGRAM

Friday Morning, April 27

### 1A: Personality

EDWARD L. WALKER, Chairman

Partial reinforcement, probability, and personality.

JACK BLOCK, *University of California Medical School.*

A classical partial reinforcement procedure was administered to sixty-six college students. The number of trials necessary for extinction of the learned response was found to be inversely related to goal discrepancy score as derived from a level of aspiration experiment. The implications of these and other results are discussed in relation to learning theory, subjective perceptions of probability, and personality.

The interpersonal dimensions of personality.

MERVIN B. FREEDMAN and TIMOTHY F. LEARY, *University of California and Permanente Foundation Hospital*; HUBERT S. COFFEY, *University of*

*California*; and ABEL G. OSSORIO, *Washington University, St. Louis.*

A comprehensive schema for the ordering of personality data is presented. The "total personality" is described in terms of variables which possess systematic inter-relatedness and interpersonal reference and which may be operationally defined. The variables involved may be used to order any type of test, datum, or unit of behavior having personality relevance and to define operationally psychoanalytic defense mechanisms.

The identification and measurement of predispositional factors in crime and delinquency: a first report. HARRISON G. GOUGH, *University of California, Berkeley*, and DONALD R. PETERSON, *University of Minnesota.*

A role-taking theory of psychopathy (see: *Amer. J. Sociol.*, 1948, 53, 359-366) was applied to an empirical study of 1,084 delinquents and 347 comparison subjects. Objective diagnostic procedures



were developed which correctly classified 78 per cent of the total sample. A cross-validated screening efficiency of 77 per cent for 99 delinquents vs. 1,092 controls was also attained.

A new technique for the study of the body image.

MAX M. LEVIN and G. GUNVALD, *University of Washington*.

To develop an objective technique for studying the role of body image in personality development, fifty-eight nine, ten, eleven-year-old girls, classified on the Wetzel Grid, duplicated their body structures using disassembled manikins of schematic bodily parts varying in height and width. The findings included significant differences for subjects differing in height and body build, with no age differences.

Some aspects of personality in deaf adolescents.

PRISCILLA AYRES, *University of California, Berkeley*.

Investigation of social maturity, overt behavior problems, behavior problem tendencies, self and social adjustment, and the expression of basic personality needs of 70 pupils, California School for Deaf. Four tests were administered, including the Rohde-Hildreth Sentence Completions Test. Comparisons were made with hearing norms and within deaf groups. Significant sex differences were found. Case studies are cited.

Prediction of violent behavior in neuropsychiatric patients. CHARLYNE TOWNSEND STORMENT, *Long Beach Veterans Administration Hospital*, and BENJAMIN C. FINNEY, *Palo Alto Veterans Administration Hospital*.

Pilot validation study assessing usefulness of Rorschach records in predicting overt aggression in neuropsychiatric patients. Records of two matched groups, 23 violent, 23 non-violent patients compared by (1) Klopfer's scoring categories, (2) blind sorting by four experienced judges, (3) assessment of aggressive content by weighted scale devised by authors. Greatest discriminative accuracy was achieved by quantitative scale.

Rorschach test correlates of assaultive behavior.

BEN C. FINNEY, *Palo Alto Veterans Hospital*.

Groups of 80 assaultive and 39 non-assaultive psychiatric patients were compared on (a) the Rorschach psychogram determinants, (b) form level, (c) a standardized rating of aggressive content. Three interpreters sorted 76 of the protocols.

There were significant differences in (a) Sum C, (b) the percentage of aggressive content, and (c) the sortings of 2 interpreters.

The Rorschach test and suggestibility: an experimental study. IRA M. STEISEL, *University of Washington*.

Fifty University of Iowa undergraduates were given the Rorschach; took part in two autokinetic sessions; were given Hull's body-sway test; and the "Ink-blot Suggestion" test of Eysenck to determine the relationship between certain specific Rorschach indices and previously proposed measures of suggestibility. The results indicated no significant relationship between the twelve Rorschach measures and the criterion measures.

The relation of intelligence to adjustment. WILLIAM D. ALTUS, *University of California, Santa Barbara College*.

Intelligence is defined by the Wechsler-Bellevue Intelligence Scale; adjustment by the number of maladjusted responses to a 36-point measure of adjustment, orally administered to soldiers in the late war. N's ranged from 100 to over four thousand. Conclusions: (1) Intelligence is positively related to good adjustment; (2) performance tests have a higher correlation with good adjustment than do verbal tests.

## 1B: Animal Learning and Physiological

DAVID EHRENFREUND, Chairman

Experimental extinction as a function of the inter-trial intervals during extinction. WARREN H. TEICHNER, *New Mexico College of A and MA*.

125 rats were given 15 trials with 45 sec. between trials in an instrumental learning situation. Subgroups of 25 animals each were then extinguished with either 15, 30, 45, 60, or 90 sec. between trials. When extinction was measured by the number of responses to a criterion, the data indicated that the rate of extinction, other things equal, is a negatively accelerated increasing function of the time between successive trials. The data also suggest, however, that another important factor determining the rate of extinction is the intertrial interval used during conditioning.

Generalization gradients and the transfer of a discrimination along a continuum. DOUGLAS H. LAWRENCE, *Stanford University*.



Three groups of rats were trained to discriminate two middle grays. One received 80 trials on these grays, a second 30 trials on a black-white discrimination and the rest on the grays, and the third approached the grays through a transition series. Efficiency of performance on the grays was in inverse order for these groups.

The role of external cues in performance motivated by fear as a learned drive. SIDNEY W. BIJOU and BENJAMIN B. MCKEEVER, *University of Washington*.

To investigate N. E. Miller's hypothesis, 26 rats were shocked in a black compartment. Subsequently half learned wheel-turning to escape to a second black compartment and half to a white. To test drive reduction both groups were permitted further wheel-turning to escape to a third compartment. Wheel-turning performance in both compartments was analyzed.

A test for latent learning after training with an irrelevant goal object as a discriminative cue. BENJAMIN B. MCKEEVER, *University of Washington*, and RAPHAEL DUBROVNER, *University of Iowa*.

Thirsty rats, satiated for food, were trained simultaneously to respond to two cues to water. At a second choice point on one side of a T-unit maze, food was the cue; on the opposite side, a white curtain. Reinforcement on both sides was equalized. Despite learning of the food cue, subsequent tests failed to reveal "cognitions" of its location.

An experimental test of two hypotheses of latent learning. JOHN P. SEWARD, WILLIAM E. DATEL, and NISSIM LEVY, *University of California, Los Angeles*.

The authors differ from Meehl and MacCorquodale in making the place where food is found a determining factor in latent learning results. Three groups of 31 rats, having explored an empty T-maze, were given one test trial after finding food on their preferred side, on their nonpreferred side, or in a neutral box, respectively. Results favored the authors' hypothesis.

Effect of large cortical lesions on learned behavior of the monkey. HARRY F. HARLOW, *Department of the Army*.

Large bilateral lesions in the frontal association areas of monkeys caused severe loss on delayed response tests and little loss on discrimination tests.

Large bilateral lesions in the posterior association areas produced little impairment of delayed response performance but deficit on discrimination tests. No additional loss was effected by combination of the frontal and posterior lesions.

Reflex theory and the locomotion of the cat.

JOSEPH E. BARMACK, *City College of New York*, and ALLAN KATCHER, *University of California, Berkeley*.

Implications of reflex theory for the normal locomotion of the cat were examined in a cinematographic study of the progression of the animal upon a specially constructed platform. Qualitative and quantitative analyses were made of samples of movements under a variety of conditions. Quantitative analyses were based upon measurements of the displacement of the back and each limb.

### 1C: Applied Psychology

CLARK L. WILSON, Chairman

Psychological studies on the human centrifuge: IX.

The effect of increased positive radial accelerations upon the ability to manipulate toggle switches. G. L. BRYAN, N. D. WARREN, R. C. WILSON, N. E. WILLMORTH, and D. W. SVENSON, *University of Southern California*.

A study of optimum switch location, direction of switch movement, and hand to be used under the influence of increased *g* is reported. Both reaction time and movement time lengthened with increased *g*. The switch below shoulder level was most efficient, and the one above, least efficient. No direction of switch movement was superior, and the hands were equally effective.

Time-history of performance of light mental and psychomotor tasks in extreme heat environments.

JOHN LYMAN and W. V. BLOCKLEY, *University of California, Los Angeles*.

Four aircraft pilots were exposed to environments of 160°, 200°, and 235° F. Performance on addition, number-checking, and a complex coordination test simulating aircraft instrument flying was compared for short successive cycles as a function of exposure time at each temperature. Differences in response pattern among the tasks were noted and interpreted in relation to factors in the tasks.

Prediction of success of telephone operators. JAY T. RUSMORE, *San Jose State College*, and R. W.

POWELL, *Pacific Telephone & Telegraph Company, San Francisco.*

A test battery for Outward Toll Operators composed of simple arithmetic, table reading, name checking, and auditory memory was found to correlate .56 with a checklist rating form completed by superiors four months after hiring. The subjects were 102 beginning telephone operators hired without consideration of test results.

Test-accident validities in relation to differential experience: A study of street-car motormen.

EDWARD W. MINIMUM, *San Jose State College.*

Many industrial investigations of the relation between abilities and accidents have been based on a group of subjects varying widely in experience. An experimental study of 153 streetcar motormen suggests that different abilities are related to accident avoidance at different experience levels, and that validity studies will have meaning only when subjects studied are relatively homogeneous with respect to experience.

Prediction of accidents with the Ruch-Wilson safe driver selection system. ROBERT R. MACKIE, *Psychological Research Center, Los Angeles.*

A battery of seven five-minute paper and pencil tests has been analyzed and found to predict accidents in a population of 640 retail and wholesale milk drivers. Based on a three year period, with drivers of varying experience, the correlation between test score and accident experience was  $-.292 \pm .046$ .

A technique for selecting combinations of advertising media. WARD J. JENSSEN, *Psychological Research Center for Business and Industry, Los Angeles.*

Many advertisers, in selecting magazines and other media in which to advertise, overlook the fact that they may be appealing to the same limited audience again and again. In a recent nationwide readership survey, a technique was developed which permits the selection of magazines on the basis of the amount of unique readership which each magazine adds to a selected "battery" of magazines.

Merit rating—something old, something new.

BRYAN WILKINSON, *Prudential Insurance Company, Los Angeles.*

Problem: Devise a merit rating system which will determine salary increases and assist in other per-

sonnel action. It must be applicable to jobs of varying complexity and responsibility and to groups of diverse size. The resulting system was based on suggestions of two hundred supervisors and upon statistical analysis of several ratings on one thousand employees. It was installed.

A design for the study and improvement of the psychological interview. J. F. T. BUGENTAL, *University of California, Los Angeles.*

It is proposed that the psychological interview (as a communication process between two or more persons, one of whom is utilizing the process to assess or influence the other) may be objectively studied and improved through the development of a schedule for its qualitative and quantitative description. Such a schedule logically should include attention to (1) topical content, (2) feeling-idea balance, (3) focus, (4) input intensity, and (5) consonance.

Employment prognosis of the post-poliomyelitic. LEONARD V. WENDLAND, *George Pepperdine College.*

The past ten year employment history of 151 post-poliomyelitic subjects, 68 males and 83 females, was studied. By personal interview the employability of individuals with varying degrees of orthopaedic disability was studied. Important areas studied include: weekly income, employment stability, type of employment and employer, the use of prosthesis, and the relation of subjects to the nation's war effort.

Friday Afternoon, April 27

## 2A: Psychodiagnostics I

MAX M. LEVIN, Chairman

An empirical categorization of psychological test report items. EDWIN S. SHNEIDMAN, WALTHER JOEL, and KENNETH B. LITTLE, *Los Angeles VA Neuropsychiatric Hospital.*

Fifteen independent "blind" interpretations of one subject's TAT and MAPS test protocols, as well as one interpretation each of his Wechsler-Bellevue, Rorschach, MMPI, Draw-A-Person, and Bender-Gestalt, were obtained. These were reduced to 1200 discrete items of personality description. A nineteen category outline, developed to categorize these items, and the distribution of the items among categories and among contributors are discussed.

How clinicians evaluate personality from diagnostic interviews. F. HAROLD GIEDT, *Veterans Administration Hospital, Long Beach.*

What cues and observations in the interview situation lead to accurate personality evaluations? Brief diagnostic interviews with four patients were presented either as silent movies, verbatim transcripts, sound recordings, or complete sound films to 48 clinicians. They made personality ratings on the patients and predicted their incomplete sentence responses, attaining greater accuracy when they read or heard the interviews.

An orientation to projective techniques: common approaches to interpretation. SEYMOUR L. ZELEN, *University of California, Los Angeles.*

An orientation to research and teaching of projective methods along the following seven commonly applied principles of interpretation is proposed: (1) translating symbolisms from the manifest to the latent level, (2) characteristic approach to the material, (3) normative interpretation or inter-individual consistency, (4) uniqueness or quality of responses, (5) deviations or intra-individual consistency, (6) analogizing from life or one projective technique to another, (7) interpreting configurational relationships.

A scale for the measurement of personality in patients with essential hypertension. LEWIS G. CARPENTER, JR., MERVIN B. FREEDMAN, ROBERT E. HARRIS, and MAURICE SOKOLOW, *University of California School of Medicine, San Francisco.*

An MMPI scale of 51 items which distinguishes women with normal blood pressure from those diagnosed as essential hypertensives has been developed. The scale was derived from item analyses of the responses of two groups of essential hypertensives and the general norms of the MMPI plus two specially selected groups of women with normal blood pressures.

An experimental investigation of the personality structure of peptic ulcer patients in psychotherapy. ALVIN SCODEL, *University of California and San Francisco Mental Hygiene Clinic.* (Introduced by Jerome Fisher)

Experimental results indicate that peptic ulcer patients in psychotherapy as compared to non-ulcer patients in psychotherapy: (1) persevere longer on an inadequate hypothesis; (2) have a lower level of aspiration; (3) remember completed tasks more

readily than incompleting tasks; (4) are more overtly passive, but also more verbally denying of their passivity.

A personality study of neurodermatitis (atopic). JAMES L. OETZEL, *Veterans Administration Center, Los Angeles*, and THOMAS H. STERNBERG, *University of California, Los Angeles.*

A group of 20 individuals with neurodermatitis (atopic) and a control group composed of patients with other skin diseases and "normals" were compared on the Rorschach Test. This paper presents a detailed analysis of the findings.

A study of the ward personnel utilized in an intensive therapy program for chronic schizophrenics. ROSEMARY P. PETERS, *Stockton State Hospital.*

Fifty ward attendants carrying therapeutic responsibility for an intensive treatment program with chronic schizophrenics were evaluated by questionnaire and sociometric techniques to determine their personal characteristics, problems, and inter-relationships. Age, education, and experience had less relevance for job performance than certain personality characteristics. Sources of discouragement and type of patient most difficult to handle varied widely.

## 2B: Educational Psychology

QUINN MCNEMAR, Chairman

Personal-social characteristics and classroom social status: a sociometric study of fifth and sixth grade girls. DENIS BARON, *Oregon College of Education.*

Two hundred twenty girls of the fifth and sixth grade levels were classified as high, average, and low in terms of sociometric rank. An item analysis of their responses to a personality questionnaire revealed significant differences between the groups in personal-social characteristics. Greatest frequencies of "unfavorable" responses were found among the groups of low and average social status.

W. I. S. C. patterns of a selective sample of dull bilingual children. GRACE M. THOMPSON, *Santa Barbara County Schools.*

Sixty Spanish-English speaking children, (median IQ 75, age 11) referred to the Guidance Department of Santa Barbara County Schools were compared on the Wechsler Intelligence Scale for Children with



a control group of English-speaking children equated as to age and performance IQ's. Verbal-Performance discrepancies were significantly higher for the bilinguals, with a unique subtest patterning apparent.

School factors related to delinquency. ESTHER GRACE NOLAN, *Los Angeles County Schools*.

This study disclosed certain school situations having definite relationship to delinquency. The necessity was also shown to provide more effective instruction and guidance to meet the individual needs of the non-Anglo, dual-language-speaking student, the one from the lower, cultural, and economical level, having limited mental development, or with non-academic but possibly high mechanical or manipulative ability.

An evaluation of the study habits of 20 matched pairs of students on the basis of interviews and observations. EUGENE C. HARTMAN, *San Jose State College*. (Introduced by Gene A. Wallar)

The purpose of this research was to make a limited evaluation of the remedial study program at San Jose State College. Twenty matched pairs of students were interviewed and their study conditions observed. An analysis was made of each student's study problems and methods. Results were obtained regarding significant differences between individuals and groups.

Some intellectual and non-intellectual factors in grade-getting. THOMAS S. COHN, *University of California, Santa Barbara College*.

Results on five measures,  $N$  of 133, were related to achievement in a basic psychology course. There is an inverse correlation between subjects who tend to answer the non-intellectual measures with plus responses, and achievement in the basic course. There is a .43 correlation between the criterion measure and a subject's insight into the instructor's responses on a personality scale.

Application of the forced-choice technique to the evaluation of instructors at the USAF Bombardment School. FRANCIS D. HARDING, JR., and WILLIAM F. LONG, *Human Resources Research Center, Mather Field, California*.

A forced-choice Instructor Description Report was developed. Revisions were based upon item analysis of cross validation data. Validity coefficients were calculated using supervisors' paired-comparison rankings and students' open-middle

rankings as criteria. Statistics reflecting several concepts of reliability were obtained. These data suggest that the Report is suitable for operational use.

The utilization of psychology in engineering courses.

HARRY W. CASE, *University of California, Los Angeles*.

Review of a new trend which may effect psychology; namely, the inclusion of psychology as one of the sciences upon which engineering is founded. At the College of Engineering, University of California, Los Angeles, a mass experiment is underway. It may be said to consist of two phases: (1) development of a new type of engineering curriculum which utilizes psychology as one of its sciences, and (2) the use of individuals trained in psychology, as instructors of certain of the engineering courses.

A survey of university administrative policies for clinical staffs. G. F. J. LEHNER and J. F. T. BUGENTAL, *University of California, Los Angeles*.

The growth of clinical psychology as a major instructional area has brought about a number of administrative problems with regard to the use of clinical teaching and supervisory persons. Such matters as titles, teaching loads, student-teacher ratios, research assistance, and promotional recognition are complicated when clinic and non-clinic faculty are contrasted. Results of a questionnaire study of APA-recognized training programs are reported.

## 2C: Learning

• LEO J. POSTMAN, Chairman

Learning sets in paired associates learning. W. R. GOODWIN, *Stanford University*. (Introduced by Lloyd G. Humphreys)

To demonstrate facilitation of learning by formation of "learning sets" (Harlow). Twenty-four subjects were divided into four equal size groups, two of which were given training designed to produce learning sets, and two other training. A post-training test showed that the groups which acquired the sets performed in a manner which tends to confirm Harlow's hypothesis.

An attempt to demonstrate disinhibition in rote learning. WILLIAM W. GRINGS, *University of Southern California*.

In the learning of lists of paired nonsense syllables in the A-B, A-K order, a test of the reinstatement of B responses (disinhibition) under distraction conditions was made with 36 subjects. A smaller (statistically insignificant) number of B responses was received under distraction (k responses remained constant) under both free and modified free recall conditions.

The effect of isolation upon the recall of numbers and nonsense syllables. DONALD R. BROWN, ALLAN KATCHER, RAVENNA MATHEWS, and JANE W. TORREY, *University of California, Berkeley*.

Inadequate control of the serial position effect in previous studies has led to results in contradiction to the von Restorff effect. Present experiment is a repetition of a previous refutation of the von Restorff effect by adding control groups to establish a recall baseline. In addition, the isolation effect was varied and new instructions, requiring recall of order, were included.

The effect of experimentally induced anxiety on retention as measured by two methods of recall. H. ELSTON HOOPER, *Veterans Administration Hospital, Long Beach*.

Word associations to anxiety material (suggestive of homosexuality) and neutral material were obtained. Results from comparison of retention revealed superior recall under anxiety conditions. It is theorized that recall is dependent upon the amount of anxiety related to material and the methods used to measure recall. Conditions of low recall or "repression" in which recall potential is high are described.

An attempt to repeat the Keet counseling-comparison experiment. RICHARD B. HEIM, *Stanford University*. (Introduced by Joseph Luft)

Following Keet's procedure exactly, this study failed to secure the same results as the original experimenter because of the failure of the learning method to result in the selective forgetting of a word which was presumably a complex indicator. A second study showed that approximately the same percentage of subjects failed to recall a supposedly affectively neutral word which was in the same serial position as the complex indicator.

A further test of secondary reinforcement in concept formation. F. J. MCGUIGAN, *University of Nevada*.

Is such a principle as secondary reinforcement effective in the formation of concepts by humans, and if so precisely what are the necessary and sufficient conditions for such an event? To aid in answering this problem, two types of concept formation cards were presented to ninety-four subjects, each providing opportunity for receiving secondary reinforcement. The results yielded positive evidence.

The effects of different initial absolute strengths of "set" on the solution of anagrams. JACK FOX and IRVING MALTZMAN, *University of California, Los Angeles*.

"Set" in problem-solving is assumed to be the acquisition of habit strength by a class of stimuli for the elicitation of a given class of responses. Two levels of absolute strength of incompatible anagram sets were established before testing on the basis of one anagram set. The more rapid solution by the low initial strength group verified this hypothesis.

Saturday Morning, April 28

### 3A: Experimental

F. NOWELL JONES, Chairman

The effect of familiarity on legibility distance of signs. T. W. FORBES, *University of California, Los Angeles*.

In connection with a study reported elsewhere and carried out jointly with the California Division of Highways, three degrees of familiarity of test material were used. These were scrambled letters, California place names seen for the first time, and the same names seen for a second time. Legibility distances increased in a consistent manner with type of test material.

Intelligibility of spoken messages: familiar and unfamiliar. HARRY M. MASON and DOROTHY L. DALTON, *Whitman College*.

This study compares intelligibilities of short spoken messages in relation to listeners' degrees of familiarity with and liking for activities the messages suggest. Results indicate that both degree of liking and degree of familiarity may be related to intelligibility through commonness of words. The study is aided by a grant from the Social Science Research Council.

The perceptual form of visual threshold stimuli.

WARREN W. WILCOX, *Vanport Extension Center, Oregon State System of Higher Education, Portland.*

Thirty black solid figures of the same area varying in maximum dimension consisting of the ellipse, rectangle, diamond, cross, and star were drawn by 43 subjects at the threshold of form discrimination. Circular forms predominated with the lowest threshold for the circle when corrected for frequency of response. The data is interpreted as evidence for the Gestalt hypothesis that stimuli are perceived as formed.

Ecological validity of Gestalt factors as perceptual cues. EGON BRUNSWIK and JOE KAMIYA, *University of California, Berkeley.*

892 pairs of parallels in seven sample pictures yield low but significant correlation between "proximity" and mechanical object unity vs. all other separations including shadow bands (point-biserial  $r = .12$ ; vs. openings and recessions only,  $.34$ ); limited evidence on "symmetry-(and-closedness)" promises high ecological validity. Allegedly "autochthonous" Gestalt factors may thus be "cues" acquired by generalized probability learning.

Ethnic stereotypes as a hidden organizational factor in learning. MURRAY KAHANE, *University of California, Los Angeles.* (Introduced by John P. Seward)

Individuals tested on lists of words each containing a hidden organizational factor of an ethnic stereotype showed significantly better learning than when tested on the same words rearranged to destroy stereotype organization. The lists constitute, in effect, a projective medium. Successful learning depends on presence of stereotype in cognitive structure of individual which enables perception of hidden organizational factor.

The role of vision in prediction motion. ROBERT M. GOTTSANKER, *University of California, Santa Barbara College.*

Adult subjects continued tracking after their target disappeared. A constant rate, a positively accelerated, and a negatively accelerated target were used, each terminating at the same rate. Both with eyes open and eyes closed during continuation, motion was fastest on the negatively accelerated target, slowest on the positively accelerated. There was a sizable positive constant error with eyes closed.

An attempt to produce pain by sensory conditioning.

M. A. WENGER and ROBERT B. VOAS, *University of California, Los Angeles,* and NICHOLAS ROSE, *Bolling Air Force Base, Washington, D. C.*

To test the hypothesis that pain may be conditioned, seven adults were given 150 to 520 paired stimulations, with CS (tactual vibration) applied to the right forearm for 5 seconds, and UCS (condensor discharge) delivered to the left forearm to produce pain, and a flexor twitch in the digits. Neither sensory conditioning nor conditioned overt flexor twitches were found.

A preliminary analysis of physical models for the electroencephalogram. JOHN L. KENNEDY, *The Rand Corporation, Santa Monica,* and WILLIAM H. EMMONS, ROBERT HENNESSAY, and FLORENCE E. GRAY, *Tufts College.*

Recordings of over 200 normal human subjects have been studied with particular attention to the anterior temporal rhythm, which appears clearly in about half the subjects. Physical models of the brain are described. It is concluded that such models may be helpful in the study of reasons for individual differences in the EEG.

The similarity-standards hypothesis. PAUL McREYNOLDS, *Veterans Administration, Palo Alto.*

"Similarity" is a problem in many areas of psychology. It is hypothesized that the tendency of Ss to react to complex stimuli as similar is a general trait, i.e., that performances involving similarity, e.g., transfer, retroactive inhibition, homogeneity of ideas, and co-satiation, should be positively correlated. The theoretical basis for and preliminary evidence in support of the hypothesis were presented.

Report of preliminary experiments with remote stimulation of the brain of the white rat. J. A. GINGERELLI, *University of California, Los Angeles.*

Twelve-minute film showing the effects on behavior of stimulation of brain areas at varying frequencies and direction of current flow.

### 3B: Statistics and Test Evaluation

J. P. GUILFORD, Chairman

A method for describing psychological profiles in terms of rational numbers. J. A. GINGERELLI, *University of California, Los Angeles.*



A method is described for assigning in a consistent manner rational numbers to profiles which are expressible in terms of ranks. By application of the method it can be shown that a unique correspondence exists between each possible profile and its rational number. The procedure permits the translation of the profiles of groups of individuals into quantitative values and hence they may be treated by the usual statistical methods.

Estimation of other coefficients of correlation from the phi coefficient. J. P. GUILFORD and N. C. PERRY, *University of Southern California*.

A formula of the type  $r = \phi \frac{\sqrt{pq}}{y} \frac{\sqrt{p'q'}}{y}$  was developed for estimating a point-biserial  $r$  or a tetrachoric  $r$  from an obtained  $\phi$  coefficient. In the case of  $r_t$  this estimate was shown to be equivalent to a first-order use of the tetrachoric- $r$  infinite series. A tabulation was made of the influence of higher powers in the series.

The relationship of the tetrachoric correlation coefficient to the phi coefficient estimated from use of the extreme tails of a normal distribution of criterion scores. N. C. PERRY, *University of Southern California*, and WILLIAM B. MICHAEL, *San Jose State College*.

A formula is derived for estimating a tetrachoric correlation coefficient  $r_{\phi_p'}$  from a phi coefficient  $\phi_p'$  computed from use of the two extreme tails of a normal distribution of criterion scores, the proportion in each tail being  $p'$ . Based upon approximately the upper and lower quarters of the criterion group  $\phi_p'$  is shown to be equivalent to a Pearsonian  $r$ .

A factor-analytic study of reasoning abilities. RUSSEL F. GREEN, ALFRED F. HERTZKA, and J. P. GUILFORD, *University of Southern California*.

Four abilities or factors involved in reasoning were hypothesized. A battery of tests was developed to investigate the hypotheses and was administered to Air Force Cadets and Officer Candidates. Seven factors of the thinking type emerged from the analysis: (1) general reasoning, (2) logical reasoning, (3) education of perceptual relations, (4) education of conceptual relations, (5) education of conceptual patterns, (6) education of correlates, (7) symbolic substitution.

Some hypotheses and tests of creative thinking.

ROBERT C. WILSON, PAUL R. CHRISTENSEN, and

J. P. GUILFORD, *University of Southern California*.

Eight hypothesized abilities and several tests of each ability are being investigated in a factor-analytic study of creative thinking. Four of these abilities are discussed: (1) sensitivity to problems (recognizing problems), (2) analysis, (3) synthesis, (4) redefinition (taking a part from one Gestalt and using it in a new way in another Gestalt). The generality of each ability is being explored.

Measurement of the quality of production in tests of creative thinking. PAUL R. CHRISTENSEN, ROBERT C. WILSON, and J. P. GUILFORD, *University of Southern California*.

To get at the originality of remoteness of association involved in responses in creative-thinking tests, various quality scores were developed. An objective approach consisted of weighting responses according to uncommonness in the examinee group for a "novelty" score. Other scores depended upon judgments of the quality of individual responses along dimensions of cleverness, indirectness, and penetration or level of insight.

The differential significance of "like" and "dislike" responses on the Strong Vocational Interest blank. LEONA E. TYLER, *University of Oregon*.

Tabulations of scoring weights for occupational and non-occupational keys and comparisons of correlations between scores on individual keys with scores based on L and D responses separately indicate that the D responses are more important than the L responses in the determination of an individual's so-called vocational interests. This fact may have considerable theoretical significance.

Vocational interests and occupation twenty years later. EDWARD K. STRONG, JR., *Stanford University*.

*Vocational Interest Test Scores* of college students in 1927-30 correlate .72 to .75 with interest profiles in 1949. There is remarkable agreement between interest scores while in college and occupation engaged in twenty years later. For example, those students who became physicians averaged 47.3, 96 per cent as high as the criterion group, whereas non-physicians averaged 29.7 when the chance score is 29.2.

An investigation of the nature of the spatial-relations and visualization factors in two high school samples. WILLIAM B. MICHAEL, *San Jose State*

College, and WAYNE S. ZIMMERMAN, *Brandeis University*, and J. P. GUILFORD, *University of Southern California*.

To test the validity of two hypotheses regarding the psychological properties of spatial-relations and visualization abilities two centroid factor analyses were made of the intercorrelations of fifteen tests in two identical batteries administered to 151 boys and 139 girls in the twelfth grade. Positive evidence was considered attained, since two groups of tests initially thought to differentiate between the two hypothesized processes clearly defined distinct factors.

Variability in American Council Psychological Examination scores from freshman to junior and senior years. D. W. BAILEY and L. M. BRAMMER, *Sacramento State College*.

The ACE scores of freshmen were compared with their raw scores as juniors and seniors. The differences between the Q, L, and T scores for freshmen and their retest scores as juniors and seniors were significant beyond the .001 level. The Pearson correlations between freshman and upper division retest scores were  $r = .78$  for Quantitative,  $r = .92$  for Linguistic, and  $r = .72$  for Total scores.

### 3C: Psychotherapy

KATHERINE BRADWAY, Chairman

The role of the clinical psychologist at an Army mental hygiene service. JERRY H. CLARK and CLOYCE L. DUNCAN, *U. S. Army Hospital, Ford Ord*.

The functions of the psychologist consist of testing, diagnosis, therapy, field work, and research. Problems which are peculiar to an Army Consultation Service are: detection of malingering, determination of duty vs. non-duty status, difficulty of follow-up in therapy cases, and the problems of providing a permissive atmosphere. The advantages of military vs. civilian status for the psychologist are also presented.

Follow-up study of patients referred for psychotherapy from a general hospital. DAVID GROSSMAN, *Los Angeles Psychological Service Center*, and F. J. KIRKNER, *Veterans Administration Hospital, Long Beach*.

Over half of the patients referred for psychological consultation at the outpatient clinic of a general hospital were diagnosed as neurotic, 20%

psychosomatic, 16% character disorders, and 9% schizophrenic. Of the 50% referred for psychotherapy, 66% contacted the agency and 50% appeared for at least one interview. An average of two months elapsed between referral and first therapeutic interview.

Evaluation of client-centered therapy through counselee letters. RICHARD A. HOGAN, *George Pepperdine College*.

Letters written following counseling by fourteen counselees were analyzed by three judges to determine whether counselees felt much, some, or little or no help was received. These ratings are compared with (1) the counselor's ratings regarding success of counseling and (2) the number of interviews. Conclusions are presented and the implications of this method of evaluation discussed.

An evaluation of CO<sub>2</sub> as a supplemental technique in brief psychotherapy; an analysis of 30 cases. F. MALCOM HEBARD, *Glendale, California*; *State Board Medical Psychiatric Examiners*, and VIRGINIA JOHNSON, *Los Angeles State College*.

The Meduna technique of 30% carbon dioxide-70% oxygen was used on thirty psychotherapeutic patients of both sexes from ten to fifty years of age presenting a wide range of emotional problems. It was concluded that the administration of CO<sub>2</sub> at this concentration materially hastens insight and integration when used in conjunction with standard brief psychotherapy practices.

An empirical study of the concept of psychotherapeutic success. DOROTHY CLIFTON CONRAD, *Veterans Administration Mental Hygiene Clinic, San Francisco*.

This study presents a set of empirically derived hypotheses concerning factors determining a therapist's judgment that a given patient is successful in therapy. Psychotherapeutic success is conceived as a function of the therapist's perception. Data are presented on 25 patients judged by their psychiatrists to be their most successful and 25 judged least successful in therapy.

The concept of self and its relationship to counseling methodology. EVERETT L. SHOSTROM, *George Pepperdine College*.

This paper describes behavior from the internal frame of reference, relating this pattern to therapy. When the concept of self is in harmony with experience, adjustment exists. When it is in relative

dis-harmony with experience, maladjustment exists. When the latter exists, the individual may seek counseling, in which he admits denied experiences, accepts rejected perceptions, or excludes inaccurate perceptions.

Personality changes following prefrontal lobotomy in twenty-five schizophrenic patients. DAVID H. RUJA, *Los Angeles State Mental Hygiene Clinic*.

Psychological testing procedures were used to determine personality changes following prefrontal lobotomy. 25 schizophrenic patients were tested one month preoperatively, one month postoperatively and six months postoperatively with the Bender-Gestalt, Wechsler-Bellevue, Rorschach, TAT, Rosenzweig P-F and MMPI. Statistical analyses revealed that prefrontal lobotomy little affects the personality of the schizophrenic. No significant movement in any direction was observed.

Measurement of the group process and the nature of therapeutic improvement in group psychotherapy. TIMOTHY F. LEARY, MERVIN B. FREEDMAN, *University of California and Permanente Foundation Hospital*; HUBERT S. COFFEY, *University of California*; and ABEL G. OSSORIO, *Washington University, St. Louis*.

The rated interpersonal behavior of seven patients during forty-eight hours of group therapy was compared with pre- and post-therapy test batteries and sociometric rankings of improvement. Three different temporal sequences of interpersonal behavior during group therapy were found. Changes in interpersonal role were significantly related to six indices of improvement and to variation in therapist's interpretative activity.

Group psychotherapy with male sex offenders. STEWART B. SHAPIRO, *Los Angeles Psychological Service Center and The Meyers Clinic*.

A group of ten sex offenders was organized to test the value of group psychotherapy in a low cost psychiatric clinic setting. Over a period of one year, using non-directive group discussion, psychodrama, group drawing, and case history discussion, the non-recurrence of offenses and overall subjective and objective reports of improvement were noted particularly in the exhibitionist patients.

A study of transference in group psychotherapy. ERIKA CHANCE, *Stanford University*. (Introduced by Joseph Luft)

Eight patients were asked to rate a random sample of statements which they had made during therapy from "most descriptive" to "least descriptive" of their feeling-relationships toward the therapist and their parent. Five of the eight correlations between the two ratings were significant, ranging from  $-.251$  to  $.633$ . They corresponded to the therapist's prediction concerning degree of transference.

An experimental investigation of Hubbard's engram hypothesis (Dianetics). ALVIN M. DAVIS, JACK FOX, and B. LEOVITS, *University of California, Los Angeles*. (Introduced by Roy M. Dorcus)

In order to investigate the claims of dianetics that retention occurs during unconscious states, a 35-word passage was read to a subject rendered unconscious by sodium pentothal administration. After recovery from the anesthesia, dianetic auditors attempted to recover the passage from the subject, so far (5 months) without success. Subject and auditors were provided by the Dianetic Research Foundation.

### 3D: Symposium

An Analysis of Unsuccessful Cases in Psychotherapy  
BARNEY KATZ, Chairman

Participants: JEROME FISHER, GEORGE F. LEHNER, RAMONA MESSERSCHMIDT, GEORGE A. MUENCH, C. L. WINDER.

Saturday Afternoon, April 28

### 4A: Psychodiagnostics II

MORTIMER M. MEYER, Chairman

The psychometric pattern of the Mexican delinquent. GERALD L. HODGSON, *California Youth Authority, Waterman, California*.

This paper examined the discriminative value of the subtests of the Wechsler-Bellevue (Form I) administered to 173 delinquent Mexican boys. The findings indicated that not all sub-tests of the Wechsler are completely serviceable in differentiating between intellectual groups. Object Assembly and Digit Symbols were least valid. The most consistent tests of differentiation were: Blocks, Picture Arrangement, Similarities, and Information.

The diagnostic utility of qualitative responses to Wechsler-Bellevue test items. LOUIS S. LEVINE,



*Veterans Administration Hospital, Palo Alto and San Francisco State College.*

Five clinical psychologists diagnosed 107 neuropsychiatric patients on the basis of their verbal responses to certain Wechsler-Bellevue items. The results of this study, and those of two previous analyses suggested that: Psychologists using patient's verbal responses to test items cannot differentiate schizophrenic from non-schizophrenic patients, even though these groups may be differentiated on the basis of quantitative score patterns.

An evaluation of the psychological processes of the neurosyphilitic: II. The Wechsler-Bellevue Scale. BERNAUR W. NEWTON, IRLA LEE ZIMMERMAN, ELLEN B. SULLIVAN, ROY M. DORCUS, THOMAS H. STERNBERG, and MURRAY C. ZIMMERMAN, *Psychology Department and Medical School, University of California, Los Angeles.*

Eighty-eight syphilitic patients, including asymptomatic and symptomatic neurosyphilitics, were subjected to intensive psychological testing before and after treatment. This report, one of a series, considers the original testing with the Wechsler-Bellevue Scale. Results indicate that the parietal process is not revealed in severe deterioration as measured by the Wechsler. Individual subtest deviations showed the most significant difference.

An evaluation of the psychological processes of the neurosyphilitic: III. A "sign" approach to the Rorschach in neurosyphilis. IRLA LEE ZIMMERMAN, BERNAUR W. NEWTON, ELLEN B. SULLIVAN, ROY M. DORCUS, THOMAS H. STERNBERG, and MURRAY C. ZIMMERMAN, *Psychology Department and Medical School, University of California, Los Angeles.*

The Rorschachs of two groups of neurosyphilitic patients, 13 with and 14 without psychosis, were compared with those of a control group of 22 syphilitic patients without central nervous system involvement by utilizing a "sign" approach (Piotrowski and Davidson). Results indicate that the neurosyphilitic groups can be reliably distinguished on the basis of Piotrowski organic signs.

A study of movement responses on the Rorschach as related to the mechanism of projection. HOBART F. THOMAS, *Veterans Administration, Palo Alto.* (Introduced by Paul McReynolds)

Two groups of hospitalized schizophrenics, 31 manifesting either delusions or hallucinations and 23 without delusions or hallucinations, were compared on the Rorschach and the McReynolds's Concept Evaluation Test. The delusional and hallucinating group gave significantly more human movement responses on the Rorschach but not on the Concept Evaluation Test, a testing of the limits procedure.

Group-Rorschach responses of thirty-five leprosarium patients. EDITH LORD, *Arizona State Department of Public Health.*

This study attempts to discover whether patients with Hansen's disease (leprosy) exhibit measurable personality modifications. Thirty-five patients, 13% of the total patient population, of the Kalaupapa Leprosarium, Molokai, Hawaii, were given a group Rorschach. There were card rejections and anatomical responses, averaging one each per record. There was evidence of depression, hypersensitivity, diminution of emotionality, and restriction of interests and of intellectual activity.

Rorschachs of stutterers compared with a clinical control. JOSEPH SHEEHAN and CHARLES ZUSSMAN, *University of California, Los Angeles.*

Rorschachs of twenty-five stutterers were compared with Rorschachs of twenty-five non-stuttering clinic patients. The stutterers showed a greater drive toward achievement, overemphasis on suppressive control, reluctance to accept dependency needs, prevalence of inner resources over channels of communication, and a greater tendency to marshal intellectual defenses against anxiety.

A level of aspiration study of stutterers. JOSEPH SHEEHAN and SEYMOUR ZELIN, *University of California, Los Angeles.*

Some theories of stuttering imply that stutterers suffer from level of aspiration difficulty. Comparison of twenty stutterers with twenty non-stutterers on the Rotter Board yielded no significant differences, with stutterers somewhat lower than controls. In this respect the stutterers were more like the crippled. These results are discussed in terms of self-concept, semantogenic and approach-avoidance conflict theories.

The hypothetical situation as a projective technique: Normative analysis of college student responses. BERNARD SAPER and GEORGE F. J. LEHNER, *University of California, Los Angeles.*

The present study represents a preliminary analysis of 96 college student responses to a series of questions about six hypothetical situations. Results are analyzed for normative tendencies, indicating the major response categories selected for each of the above situations. The hypothetical situation is discussed in terms of its value as a projective technique for assessing significant motivational factors in personality.

Comparative performance of psychotics with brain damage and non-psychotics on an original test of symbol arrangement. THEODORE C. KAHN, *Los Angeles Harbor Junior College*.

Fifty patients in a Neuropsychiatric Hospital, psychiatrically diagnosed as brain damage psychotics were matched with 50 non-psychotics. The Kahn Test of Symbol Arrangement was used. The test consists of fifteen varying plastic shapes, such as hearts, stars, dogs, which the subject lines up on a strip divided into fifteen squares. Of the 197 responses analyzed, 99 were found statistically significant.

Comparative performance of schizophrenics and normals on a new projective test of object-symbol arrangement. DAVID H. FILS, *Torrance Schools and Los Angeles Harbor Junior College*.

An experimental group of 50 psychiatrically diagnosed schizophrenic patients at a veteran's neuropsychiatric hospital and a control group of 50 normal veterans matched for age, education, marital and occupational status, military rank, and IQ, were both tested with a new projective technique involving object symbol arrangement. A numerical scoring system was devised and significant statistical differentiation between the two groups was obtained.

#### 4B: Social Psychology

CLARENCE L. WINDER, Chairman

An investigation of the relationship between intolerance of ambiguity and ethnocentrism. JEANNE BLOCK, *Stanford University*, and JACK BLOCK, *University of California Medical School*.

The relationship between ethnocentrism as measured by the Berkeley Ethnocentrism Scale and intolerance of ambiguity as reflected by rapidity of norm establishment in the autokinetic situation was studied utilizing sixty-six college students. As predicted, a statistically significant inverse relationship was found between ethnocentrism scores

and the point of norm establishment. The results are related to genotypical personality variables.

Social stereotyping in response to clinical classification. DAVID COLE and ROSEMARY LANE, *Occidental College*.

Attaching popular clinical labels to Szondi faces showed statistically significant changes of previously designated values given them by eighty subjects. Labels produced increased liking for "neurotics," "epileptics," "normals," "slightly maladjusted." Largest shifts entailed increased dislike for male homosexuals. Comparisons of masculine interests with reactions to homosexual pictures showed trends predicted by Szondi theory and Freudian concept of reaction formation.

A study of attitudes as functions of objective knowledge. LAWRENCE J. MICHIELS and JOSEPH B. COOPER, *San Jose State College*.

Two groups of one hundred subjects ranked thirty national groups and thirty sports with respect to preference and presumed knowledge. Then they were tested for objective knowledge. Objective knowledge was near constant for all national groups while presumed knowledge increased disproportionately at the antipathy end of the series. For sports, both presumed and objective knowledge decreased proportionately as preference decreased.

The social acceptability of the masculinity-femininity deviant. ROBERT T. ROSS, *Long Beach State College*.

In terms of the masculinity-femininity continuum, the following characteristics were found to be of advantage in gaining acceptability in the social situation: (1) being average; (2) being a male; (3) being masculine. The following were found to be disadvantages: (4) being a female; (5) being an M-F deviate; (6) being a contra-sexed M-F deviate. There is some evidence that these advantages and disadvantages are additive.

The E-F scale, the MMPI and Gough's Pr scale. THOMAS T. TAFEJIAN, *University of California, Los Angeles*. (Introduced by W. D. Altus)

Gough's Pr scale was validated on a new sample. In addition, a new scale of 40 items was derived from the MMPI through interquartile analysis of the E-F scale. When cross validated, the 40 items correlated .62 with the E-F scale. Inspection of the 40 items revealed the high scorers to be rather prudish, religious, and rigid.

The W-A-Y technique applied to American and Parisian subjects. THOMAS G. MACFARLANE, JAMES F. T. BUGENTAL, and LELIA S. KAUFFMAN, *University of California, Los Angeles*.

In the W-A-Y (Who are you?) technique, the subjects' three answers to the question, "Who are you?" are analyzed in terms of eleven categories. From this analysis, inferences can be made concerning the self-concept. Previously all work with this technique has been done with subjects of American background. Records were secured from 60 Parisian subjects and comparisons with American were made.

A research plan for the study of organizational effectiveness. ANDREW L. COMREY, *University of Southern California*.

The background and general plan of research are described for an Office of Naval Research project at the University of Southern California. The objective of the project, which developed from an interdisciplinary seminar involving students and faculty from psychology, public administration, and

sociology, is to determine some of the factors which are related to organizational effectiveness.

#### 4C: Symposium

ARTHUR BURTON, Chairman

##### The Role of the Psychologist in Psychotherapy in a State Facility

Participants: NEIL CAMPION, DONALD KLEIN,  
VIRGINIA RILEY, IRVING STONE.

#### Special Luncheon Meetings

- A. Clinical Psychologists in the California State Civil Service. ARTHUR BURTON, presiding.
- B. Meeting of the Psi Chi fraternity sponsored by the Occidental College and San Jose State College chapters. DAVID COLE, Western District Vice-President, presiding.
- C. Meeting of the Society for Projective Techniques. F. J. KIRKNER, presiding.



# PROCEEDINGS OF THE TWENTY-THIRD ANNUAL MEETING OF THE MIDWESTERN PSYCHOLOGICAL ASSOCIATION

DAVID A. GRANT, *Secretary-Treasurer*

*University of Wisconsin*

THE Midwestern Psychological Association held its twenty-third annual meeting at the Drake Hotel, Chicago, April 27-28, 1951. The program was arranged by a committee consisting of Orlo L. Crissey (chairman), Judson S. Brown, and Julian B. Rotter. The local arrangements were handled by a committee consisting of Benton J. Underwood (chairman), Albert A. Canfield, Harry P. Shelley, William F. Soskin, Janet A. Taylor, and Joseph M. Wepman. Registrations totalled 1140.

The program consisted of 145 papers scheduled in 22 sessions. The major emphasis was on learning, industrial psychology, clinical and projective techniques, and evaluation and measurement. In addition there were six symposia: psychotherapy, conditioned anxiety, Rorschach validation, industrial psychology in the defense economy, factorial theory in the study of personality, and school psychology. The APA Division of School Psychologists organized the regional symposium mentioned above; the SPSSI, a Division of the APA, organized two open meetings on Inter-group Relations and the Teaching of Social Psychology; and the APA Committee on Intraprofessional Relationships in Psychology gave a preliminary report.

The presidential address, given by William A. Hunt, of Northwestern University, was entitled, "Clinical Psychology—Science or Superstition?" It was attended by more than 800 psychologists and guests and was followed by a social hour. At the annual business meeting the policy of limiting the program to two days and a maximum of 160 major completed research papers with anonymous submission of abstracts was endorsed for another year. In addition it was voted to extend life membership in the Association to all ex-presidents of the MPA and to members who have attained their sixtieth birthday and who have been members for at least five years. Such members are to apply to the Secretary, and their application will be transmitted

to the Executive Council for action. The business meeting voted to send \$200 to CARE for books to be sent to a European and a Far Eastern University.

The newly elected officers were: Donald B. Lindsley, President; and Delos D. Wickens, Executive Council (three years). The other members of the Executive Council are Paul E. Meehl, Arthur W. Melton, and the president and secretary-treasurer, *ex officio*.

The next annual meeting of the Association will be at the Neale House in Columbus, May 2-3, 1952. Professor D. D. Wickens of Ohio State University will be chairman for local arrangements.

The following 70 APA Fellows and Associates of the APA availed themselves of the standing invitation to submit their annual dues of \$1.50 and join the MPA:

Altman, Charlotte Hall	Fotiu, Peter G.
Anderson, Robert P.	Gagne, Robert M.
Arnold, Magda B.	Gordon, Thomas
Baker, Corinne F.	Graver, Harold A.
Behan, Richard A.	Guion, Robert M.
Bilodeau, Edward A.	Guttman, Norman
Borstelmann, Lloyd J.	Heathers, Glen
Brady, Joseph V.	Hoffman, Martin L.
Bridgman, Charles S.	Hover, Gerald L.
Brudo, Charles S.	Johnson, Thomas F.
Cohen, Jozef	Kates, Solis
Coladarci, Arthur P.	Kessler, Jane W.
Collier, Mary E.	Kinget, G. Marian
Cotton, John W.	Leary, Robert W.
Crandall, Vaughan J.	Lifton, Walter M.
Curtis, James W.	Lotsof, Erwin J.
Darbes, Alexander J.	Lysak, William
Davenport, Kenneth S.	Macdonald, G. L.
Davis, Roger T.	Mehlman, Benjamin
Demaree, Robert G.	Moldawsky, Stanley
Denton, J. C., Jr.	McCormick, E. J.
DeRidder, Lawrence M.	Noble, Clyde E.
DeVos, George	Nowlis, Helen H.
Dunn, Wesley	Otis, Jay L.
Estenson, Lyle O.	Owen, Marjorie L.
Fatzinger, Frank A.	Pacht, Asher R.
Fink, John Benson	Polster, Erving

Pope, Henry L.  
Ratoosh, Philburn  
Rubin, Harry K.  
Sell, DeWitt E.  
Shaw, Marvin  
Staker, James E.  
Sutker, Alvin R.  
Thomas, Leon L.

Thomson, Robert M.  
Wilson, Elizabeth K.  
Wilson, Ronald F.  
Wirt, S. Edgar  
Wischner, George J.  
Witsaman, Leslie  
Wood, Wendell F.  
Woodbury, Charles B.

Hamilton, Robert V.  
Harrington, Robert  
Heimlich, Frederick J.  
Helmstadter, Gerald C.  
Hill, Winfred  
Horral, Louise E.  
Hutter, Samuel  
Jeffrey, Wendell  
John, Herman B.  
Johnson, Duane M.  
Kaestner, Noel  
Kalish, Harry  
Kanfer, Frederick  
King, Gerald F.  
Kirk, Robert B.  
Kling, Julius W.  
Klumpp, Roy  
Kurke, Martin I.  
Laffer, Barbara  
Lawson, Reed  
Leuthold, Carl A.  
Loving, Edward  
Lubach, John  
Mainer, Robert  
Malone, Robert L.  
McNelly, George  
Meyer, John K.  
Michels, Kenneth M.  
Miles, Minnie C.  
Miller, Irwin  
Montgomery, Victor E.  
Munn, Irving M.  
Nagle, Bryant F.  
Nelson, William  
Ohlsen, Merle M.  
Oliver, James  
Paisios, John P.  
Paull, Donald  
Paulsen, John R.

Pepper, Roger S.  
Phillipson, Leonard  
Pumroy, Donald K.  
Pumroy, Shirley S.  
Rabideau, Gerald F.  
Rathfelder, Rollo  
Reed, Eleanor  
Reetz, Arline E.  
Reynolds, Gerald  
Richardson, Charles E.  
Roberts, William K.  
Rosmarin, Joan  
Rottersman, Leon  
Runyon, Eugene L.  
Salmon, Charles  
Schorr, Martin M.  
Segel, Harold  
Saibert, Warren F.  
Shattuck, Merrill  
Shifra, Ginzburg  
Sidwell, Phillip  
Simms, Nancy  
Sines, Jacob O.  
Smader, Robert  
Stevens, Walter  
Swanson, Edward O.  
Swensen, Clifford Jr.  
Thomas, Ross  
Uehling, Edward R.  
Vande Bunt, Carol  
Walsh, Francis  
Wehrkamp, Robert  
Whitted, Geraldine L.  
Williams, Milton Jr.  
Winker, James B.  
Wolfenstein, Charlotte  
Woodbury, John  
Yngve, Helen

The following 127 applicants were elected to membership in the Association upon recommendation of the Executive Council:

Acker, Stanley R.  
Albert, Ferguson G.  
Ardies, William L.  
Aukes, Lewis E.  
Baker, Paul C.  
Barch, Abram  
Blackwood, Duane F.  
Bommarito, Ben  
Bonner, Anne  
Boyce, James E.  
Bratrude, Donald  
Braun, Richard R.  
Briggs, George Jr.  
Brown, Earl C.  
Bujold, Colleen J.  
Butler, Robert  
Chalupsky, Albert  
Chambers, Randall M.  
Chapman, Loren  
Chodorkoff, Bernard  
Clark, John G.  
Clark, Margaret  
Clay, Betty Jane  
Cleland, Charles  
Colby, Archie N.

Davis, Robert  
Denenberg, Victor  
Deutsch, Stanley  
Dieppa, Jorge J.  
Doten, George  
Dutton, Eugene  
Eason, Robert  
Ehrmann, John C.  
Epstein, Seymour  
Esselbruegge, Calvin  
Evans, Louise  
Evans, Thomas D.  
Fitzpatrick, Eugene  
Frick, Willard B.  
Friedman, Norman  
Futchik, Lawrence J.  
Gardner, Harvey F.  
Gaskill, Riley  
Gelber, Beatrice  
Glazer, Stanford  
Goer, Marvin  
Grater, Harry Jr.  
Grove, Byron A.  
Gustafson, Levarl  
Hahn, Clifford P.

## PROGRAM

### Clinical Tests

BOYD R. MCCANDLESS, *Ohio State University*,  
Chairman

Document 3275; Microfilm \$1.00;  
Photoprints \$8.25<sup>1</sup>

BERTRAM D. COHEN and MARY E. COLLIER,  
*Indiana University*. The relationship of the  
Wechsler Intelligence Scale for Children to some  
other intelligence tests.

<sup>1</sup> An abstract of each paper has been filed with the  
American Documentation Institute, Science Service Build-  
ing, 1719 N Street, N.W., Washington, D. C. Microfilm  
or 6 × 8 photocopies of groups of related papers may be  
ordered by document number as indicated.

PATRICIA PIERSTORFF, *University of Wisconsin*. Ef-  
fects of discouragement on Stanford-Binet IQ  
scores.

ALVIN R. MAHRER, *VA Hospital, Chillicothe, Ohio*.  
The psychological structuring of digits.

BERNARD CHODORKOFF, *University of Wisconsin*.  
An investigation of the qualitative differences in  
the vocabulary responses of schizophrenics and  
normals.

JAMES L. HEDLUND, I. E. FARBER, and HAROLD P.  
BECHTOLDT, *State University of Iowa*. Norma-  
tive characteristics of the Manifest Anxiety Scale.

STANLEY MOLDAWSKY and PATRICIA CORCORAN  
MOLDAWSKY, *State University of Iowa*. Digit  
span as an anxiety indicator.

MELVIN R. MARKS and CHARLES K. RAMOND, *Tulane University*. A criticism of the Wechsler-Bellevue Scale as a diagnostic instrument.

BORIS SPEROFF and WILLARD KERR, *Illinois Institute of Technology*. Validation and evaluation of an empathy test.

RUSSELL COLGIN and A. R. GILLILAND, *Northwestern University*. Norms, reliability, and forms of the MMPI.

### Projective Techniques I

REX. M. COLLIER, *University of Illinois*, Chairman

Document 3275, *cont.*

HENRY SAMUELS, *Veterans Administration Center, Dayton, Ohio*. Agreement between ratings based on projective techniques.

KENNETH H. BRADT, *Northwestern University*. The measurement of aggression by means of a group-administered projective technique.

HARRY K. RUBIN, *Milwaukee County Guidance Clinic*. Effect of variation in structure upon projection in TAT.

SOL L. GARFIELD, L. BLEK, and F. MELKER, *VA Mental Hygiene Clinic, Milwaukee, Wisconsin*. The influence of method of administration, sex of examiner, and sex of subject on selected aspects of TAT stories.

LESTER S. MONEY, JR., and EDITH A. WEISSKOPF, *Purdue University*. The effect on projection of similarity between the subject and the central figure of TAT pictures.

JORGE J. DIEPPA and EDITH A. WEISSKOPF, *Purdue University*. A study of experimentally induced "faking" of TAT responses.

JOSEPH D. MATARAZZO and IVAN N. MENSCH, *Washington University Medical School*. Reaction time characteristics of the Rorschach test.

GUINEVERE S. CHAMBERS, *University of Pittsburgh*. An investigation of the relationship between the popular (P) response on the Rorschach and the Group Conformity Rating (GCR) on the Rosenzweig Picture Frustration Study (P-F).

ERWIN J. LOTSOFF, *The Ohio State University*. Intelligence, verbal fluency, and the Rorschach test.

WAYNE H. HOLTZMAN, *The University of Texas*. The examiner as a variable in the Draw-A-Person test.

### Projective Techniques II

DOROTHY MARQUIS, *University of Michigan*,  
Chairman

Document 3275, *cont.*

GEORGE DEVOS, *University of Chicago*. A quantitative approach to affective loading in Rorschach responses.

WILLIAM N. THETFORD, *Michael Reese Hospital, Chicago, Illinois*, and GEORGE DEVOS, *The University of Chicago*. A Rorschach study of clinical groups by means of Fisher's Maladjustment Index.

MARGUERITE R. HERTZ, *Western Reserve University*. Evaluating adjustment in terms of the Rorschach method.

WILSON H. GUERTIN, *Beatty Memorial Hospital, Westville, Indiana*, and ALBERT I. RABIN, *Michigan State College*. The Szondi test as a forced-choice technique.

VIRGIL T. HILL and W. B. LEMMON, *University of Oklahoma*. The Szondi test and chance.

LLOYD J. BORSTELMANN, *Drake University*. Szondi picture selection patterns of 400 college students.

G. MARIAN KINGET, *University of Louvain, Belgium*. The Drawing Completion Test.

### Personality

ROSS STAGNER, *University of Illinois*, Chairman

Document 3275 *cont.*

ERVING POLSTER, *State University of Iowa*. An investigation of ego functioning in dreams: I. Plausibility of dream narratives.

MAURICE H. KROUT, *Chicago Psychological Institute*. An experimental attempt to produce unconscious manual movements and determine their significance.

SEYMOUR EPSTEIN, *University of Wisconsin*. A study of overinclusion in a schizophrenic and control group.

JAMES O. PALMER, IVAN N. MENSCH, and JOSEPH D. MATARAZZO, *Washington University Medical School*. Case history and psychological examination data in anorexia nervosa, and their implications for test validity.

EUGENE L. RUNYON and ELEROY L. STROMBERG, *Personnel Research Institute, Western Reserve University*. The evaluation of field work students



in clinical psychology by the forced-choice check list technique.

FRED E. FIEDLER, *University of Chicago*. Objective measurement of unconscious attitudes in psychotherapy.

SEYMOUR ROSENBERG, *Indiana University*. The extinction of experimentally induced anxiety by two verbal methods of therapy.

#### Educational

A. C. VAN DUSEN, *Northwestern University*,  
Chairman

Document 3276; Microfilm, \$1.00;  
Photocopy, \$5.10

EUGENE D. FITZPATRICK, *Southern Illinois University*. The statistics need by the classroom teacher.

JANE W. KESSLER, *Western Reserve University*. A modification of the TAT used to investigate personality factors related to success in nursery school teaching.

GRAHAM B. BELL and CAROL G. BELL, *Northwestern University*. An investigation of student attitude toward objective and essay tests.

T. L. ENGLE, *Indiana University*. A national survey concerning the teaching of psychology in high schools.

L. J. BISCHOF, *Western Illinois University*. Relationships of General Aptitude Test Battery scores with scores on the ACE Psychological Examination for College Freshmen.

ARNOLD PUSAR, *Northwestern University*. A study of the relationship between reading interests and vocational interests.

PAUL TORRANCE, *Kansas State College*. The psychodynamics of self evaluation of scholastic abilities and achievement of college freshmen.

JAMES C. REED and ROGER S. PEPPER, *Wayne University*. The interrelationship of rate, vocabulary, and comprehension in reading.

ROBERT C. KRATZKE, ROBERT J. CRAMER, LOREN IVERSEN, and WILLARD KERR, *Illinois Institute of Technology*. Anticipatory work attitudes of high school students.

#### Evaluation and Measurement I

JOHN HORROCKS, *Ohio State University*, Chairman

Document 3276, *cont.*

ROLLO R. RATHFELDER and C. H. LAWSHE, *Purdue University*. A factor analysis of a battery of mental tests.

J. C. DENTON, JR., *Procter and Gamble*. Test parameters and factor analysis.

W. GRUEN and R. B. CATTELL, *University of Illinois*. Insight into the dynamics of some personality test responses from factorization.

E. A. COGAN and R. B. CATTELL, *University of Illinois*. A factor analysis of newly designed personality tests.

VIRGINIA ZACHERT, *Human Resources Research Center, Lackland Air Force Base*. Factor analyses of a classification battery scored "Rights," "Wrongs," and "Formula."

#### Evaluation and Measurement II

EDWARD S. BORDIN, *University of Michigan*,  
Chairman

Document 3276, *cont.*

JANE LOEVINGER, GOLDINE C. GLESER, and PHILIP H. DUBOIS, *Washington University*. Maximizing the resolving power of a test.

JAROLD R. NIVEN, *Purdue University*. A comparison of two attitude scaling techniques.

WINIFRED K. MAGDSICK and LEROY L. BLITZ, *Washington University*. An evaluation of the Wechsler Intelligence Scale for Children at the first grade level.

DEWITT E. SELL, *Ohio State Reformatory*. An Evaluation Aptitude Test.

H. H. REMMERS and A. J. DRUCKER, *Purdue University*. Predicting success in pharmaceutical education.

#### Learning I

WILSE B. WEBB, *Washington University*, Chairman

Document 3277; Microfilm \$1.00;  
Photocopy \$9.00

GEORGE E. BRIGGS and DELOS D. WICKENS, *University of Wisconsin and Ohio State University*. Secondary stimulus generalization as a factor in sensory pre-conditioning.

DELOS D. WICKENS, *Ohio State University*. Stimulus generalization of the GSR.

JOHN B. FINK and R. C. DAVIS, *Indiana University*. Generalization of a muscle action potential response to tonal duration.

ROSELYN RASH, GERALD ROSENBAUM, and KENNETH A. WAGNER, *Wayne University*. Spatial generalization of voluntary responses as a function of manifest anxiety.

HARRY P. BAHRICK, *Ohio Wesleyan University*. Latent learning as a function of the strength of unrewarded need states.

D. F. BLACKWOOD and DELOS D. WICKENS, *Ohio State University*. The prediction of latent learning from secondary reinforcement.

WALLACE R. McALLISTER, *State University of Iowa*. The spatial relation of irrelevant and relevant goal objects as a factor in simple selective learning.

NORMAN GUTTMAN, *University of Wisconsin*. The relationship between the rate of the periodically reinforced bar-pressing response and concentration of reinforcing agent.

WILLIAM K. ESTES, *Indiana University*. Need reduction vs. stimulus characteristics as determiners of the relation between latency and amount of reinforcement.

W. BARBARA BROWN, *Ohio State University*. Effect of differential quantity of reward on acquisition and performance of a maze habit.

ROBERT L. MARTINDALE and M. RAY DENNY, *Michigan State College*. The effect of the initial reinforcement on subsequent response tendency under different conditions of food expectancy.

## Learning II

CARL P. DUNCAN, *Northwestern University*,  
Chairman

Document 3277, *cont.*

CAROL H. AMMONS and S. I. ALPRIN, *University of Louisville*. Rotary pursuit performance as related to the age and sex of pre-adult subjects.

ABRAM M. BARCH, *State University of Iowa*. A demonstration of retroactive inhibition in a pursuit-rotor task.

LEVARL N. GUSTAFSON and ARTHUR L. IRION, *University of Illinois*. Reminiscence in bilateral transfer.

EDWARD A. BILODEAU, *Human Resources Research Center, Lackland Air Force Base*. Decrements in a simple motor task before and after a single rest.

PATRICIA VON TREBRA and GERALD RUBIN, *University of Wisconsin*. Analysis of the basic com-

ponents of psychomotor performance in relation to learning.

ROGER T. DAVIS, *University of South Dakota*, and ROBERT WEHRKAMP and KARL U. SMITH, *University of Wisconsin*. Time characteristics of manual motion as a function of laterality and of direction of movement.

ALFRED H. SHEPHARD, *University of Toronto*. Losses of skill in performing one task arising from different levels of performance on another task.

INA MCD. BILODEAU and BRADLEY REYNOLDS, *Human Resources Research Center, Lackland Air Force Base*. The effects of distribution of practice on performance of a self-paced psychomotor task.

ROBERT S. LINCOLN, *University of Wisconsin*. An investigation of target speed factors in visual tracking.

FREDERICK H. KANFER, IRVING SALTZMAN, and JOEL GREENSPOON, *Indiana University*. Delay of reward and human motor learning.

GLORIA LAUER GRACE and JOHN C. JAHNKE, *University of Illinois*. After effects of reinforcement in a serial learning task.

## Learning III

LAWRENCE M. STOLURÓW, *University of Pittsburgh*,  
Chairman

Document 3277, *cont.*

BRADLEY REYNOLDS, *Human Resources Research Center, Lackland Air Force Base*. Correlation between two psychomotor tasks as a function of distribution of practice on the first.

V. ROSENTHAL, J. W. HARNEY, and P. S. SHURRAGER, *Illinois Institute of Technology*. Simultaneous bilateral flexor or extensor performance vs. unilateral flexor or extensor performance as predictor of Ideo-motor skill.

ROBERT A. GOLDBECK, B. REYNOLDS, and INA BILODEAU, *Human Resources Research Center, Lackland Air Force Base*. Performance on a psychomotor test administered without ordinary testing precautions.

## Learning IV

ROBERT M. GAGNÉ, *Human Resources Research Center*, Chairman

Document 3277, *cont.*

- L. M. STOLUROW and C. H. SWENSEN, *University of Pittsburgh*. A new variable facilitating serial rote learning.
- CLYDE E. NOBLE, *State University of Iowa*. A behavioristic theory of meaning.
- ROBERT E. SCHMIDT and W. J. BROGDEN, *University of Wisconsin*. The effect of number of alternate choices at each choice point on the acquisition of a verbal maze.
- BRUCE M. ROSS, *University of Wisconsin*. The effect of variable stress-presentation conditions on Wisconsin card-sorting test scores.
- ROBERT S. FRENCH, *University of Wisconsin*. Rote discrimination learning with five degrees of stimulus homogeneity.
- I. E. FARBER and FERN L. MURFIN, *State University of Iowa*. Performance set as a factor in transfer of training.
- ARTHUR L. IRION, G. ROBERT GRICE, and J. W. KLING, *University of Illinois*. Rehearsal effects in rote learning.
- DAVID A. GRANT, *University of Wisconsin*, and HAROLD W. HAKE, *The Johns Hopkins University*. Dark adaptation and the Humphreys random reinforcement phenomenon in eyelid conditioning.
- LOWELL M. SCHIPPER and DAVID A. GRANT, *University of Wisconsin*. The acquisition and extinction of conditioned eyelid responses as a function of the percentage of fixed-ratio random reinforcement.
- FRANK A. LOGAN, *State University of Iowa*. The role of delay of reinforcement in determining reaction potential.
- PAUL R. FULLER, *Billings VA Hospital, Indianapolis*, and RAY DENNY, *Michigan State College*. Learning on the basis of escape from secondary cues of non-reinforcement.
- GERALD R. PASCAL, *University of Pittsburgh*. The delayed reaction for form and place contrasted.
- EMANUEL KUNO BELLER and EDITH NEIMARK, *Indiana University*. Development of "moral" concept in children.
- HAROLD A. DELP and ARLINE E. REETZ, *University of Minnesota*. Follow-up of the effects of a concentrated remedial reading program.
- MILDRED C. TEMPLIN, *University of Minnesota*. A screening test for the detection of articulatory speech defects.
- A. J. DRUCKER and H. H. REMMERS, *Purdue University*. Environmental determinants of basic difficulty problems.

### Geriatrics

MELVIN S. HATTWICK, *Needham, Louis and Brorby, Inc., Chicago*, Chairman

Document 3278, *cont.*

- A. R. LAUER, *Iowa State College*. Relation of mileage, age, and sex to reported accidents.
- WILLIAM A. OWENS, JR., *Iowa State College*. Mental abilities changes from twenty to fifty—a longitudinal study.
- ALVIS W. CALIMAN, *Michigan State College*. Personality adjustment of aging women.
- FLORENCE H. WARSHAWSKY, CAROLYN K. GROSSMAN, and MARGUERITE R. HERTZ, *Western Reserve University*. The personality characteristics of a group of institutionalized old people.

### Industrial I

C. H. LAWSHE, *Purdue University*, Chairman

Document 3279; Microfilm, \$1.00;  
Photoprints, \$4.65

- ERNEST J. MCCORMICK, *Purdue University*, JOHN A. BACHUS, *The Kroger Co.*, and WILLIAM K. ROBERTS, *General Motors Institute*. Paired comparison ratings based on partial pairings.
- RICHARD W. HIGHLAND and JAMES R. BERKSHIRE, *Human Resources Research Center, Chanute Air Force Base*. A methodological study of forced choice performance rating.
- ALLEN H. HOWARD and HOWARD A. SHUTZ, *Illinois Institute of Technology*. A factorial analysis of a salary job evaluation plan.
- MINNIE C. MILES, *Purdue University*. The validity of a job description check-list for evaluating office jobs.

### Childhood and Adolescence

VINCENT NOWLIS, *State University of Iowa*,  
Chairman

Document 3278; Microfilm, \$1.00;  
Photoprints, \$2.10

- EDWARD CLIFFORD and GEORGE J. WISCHNER, *University of Illinois*. The relative severity of different kinds of parental punishments as evaluated by preschool children.



**Industrial II**

FREDERICK R. WICKERT, *Michigan State College*,  
Chairman

Document 3279, *cont.*

- LOREN D. IVERSEN, REGINALD D. MALONE, and WILLARD A. KERR, *Illinois Institute of Technology*. Organizational behavior: A factory study.
- RAYMOND H. VAN ZELST and WILLARD A. KERR, *Illinois Institute of Technology*. A study of technical and scientific productivity.
- VERNON KEENAN, WILLARD KERR, JOHN GRIFFITH, and ROGER REINING, *Illinois Institute of Technology*. Testing a readjustment stress theory of accidents.
- WILLARD KERR and BORIS SPEROFF, *Illinois Institute of Technology*. Interpersonal desirability value as a factor in steel mill accidents.

**Industrial III**

JOHN H. RAPPARLIE, *U.S. Rubber Company*,  
Detroit, Chairman

Document 3279, *cont.*

- ADAM R. GILLILAND and SLATER E. NEWMAN, *Northwestern University*. The Humm-Wadsworth Temperament Scale as an indicator of the "problem" employee.
- NORMAN FRIEDMAN and ERNEST J. MCCORMICK, *Purdue University*. An investigation of personnel questionnaire item responses in various situations.
- ABRAHAM S. LEVINE, *Human Resources Research Center, Lackland Air Force Base*. Air Force research on the prediction of officer proficiency.
- JAMES J. JENKINS, *University of Minnesota*. Measured characteristics of Air Force weather forecasters and success in forecasting.

**Industrial IV**

CHESTER E. EVANS, *General Motors Corporation*,  
Detroit, Chairman

Document 3279, *cont.*

- OTTO J. KROH, *Kroh-Wagner Company*, RAYMOND H. VAN ZELST and WILLARD KERR, *Illinois Institute of Technology*. Do workers oppose use of employment tests?
- REBECCA ARNELL DEWEY, *Charles S. Dewey and Associates*. Employees' responses on their interest in intracompany job mobility.

JEROME G. KUNNATH, ROBERT C. KRATZKE, and WILLARD A. KERR, *Illinois Institute of Technology*. Overheard content of worker conversations.

JOHN MCGINNIS, *Oscar Meyer and Co.* Some useful contributions to employee opinion survey techniques. I. A "new," practically self-administering and easily scored survey method.

MAX E. ELLIS, *Oscar Meyer and Co.* Some useful contributions to employee opinion survey techniques. II. Tabulating machine techniques which make the "card deck" survey method practical and efficient.

CHARLES S. BRIDGMAN, KARL U. SMITH, and ROBERT WEHRKAMP, *University of Wisconsin*. A comparison of frequent and infrequent users of a household product.

**Physiological and Comparative I**

FREDERICK A. MOTE, *University of Wisconsin*,  
Chairman

Document 3280; Microfilm, \$1.00;  
Photoprints, \$4.05

HARRY W. BRAUN, H. W. BARNES, and R. A. PATTON, *University of Pittsburgh*. Effect of electroshock convulsions on discrimination learning in monkeys.

MELVIN H. MARKS and RANDALL M. CHAMBERS, *Human Resources Research Center, Lackland Air Base*. Incidence of audiogenic seizures following experimental induction of middle ear disorder.

BEATRICE GELBER, *Indiana University*. Investigations of the behavior of *Paramecium Aurelia*: I. Modification of behavior after training with reinforcement.

ROBERT W. LEARY, *University of Wisconsin*. A study of serial rote learning in Rhesus monkeys.

MARVIN H. DETAMBEL, JOHN T. COCKRELL, and JOHN W. COTTON, *Indiana University*. Relative intake of sucrose and saccharine solutions as a function of concentration.

JOHN W. COTTON, JOHN T. COCKRELL, and MARVIN H. DETAMBEL, *Indiana University*. Amount of training and food deprivation as determiners of sucrose and saccharine intake by albino rats.

WALTER GOGEL and E. H. HESS, *University of Chicago*. Preference for colored mash in visually naive and experienced chicks.

## Sensory-Perceptual Processes

H. RICHARD BLACKWELL, *University of Michigan*,  
Chairman

Document 3280, *cont.*

ROBERT B. AMMONS and R. C. ATKINSON, *University of Louisville*. Practice effects in visual perception.

DONALD A. HOPPE, HAROLD I. STALDER, and A. R. LAUER, *Iowa State College*. Further studies of the effect of reflectorized color and pattern on perception and judgment of relative motion under conditions of mesopic vision.

JEROME COHEN, *University of Pittsburgh*. Retinal rivalry rate with words as stimuli.

F. A. MOTE and ELEANOR REED, *University of Wisconsin*. The influence of varying light-dark ratio of intermittent pre-exposure on human dark adaptation.

DONALD R. MEYER, *Ohio State University*. The stability of human gustatory sensitivity with changes in time of food deprivation.

JAMES P. EGAN and ROY G. KLUMPP, *University of Wisconsin*. The error due to masking in the measurement of aural harmonics by the method of best beats.

## Physiological and Comparative II

HARRY W. BRAUN, *Western Psychiatric Institute and Clinic, Pittsburgh*, Chairman

Document 3280, *cont.*

P. S. SHURRAGER and R. H. LEVY, *Illinois Institute of Technology*. Vitreous substrate degraded in dark adaptation photo-repolymerized by light stimulation.

PETER ARNOTT, CHARLES BRUDO, and CHESTER W. DARROW, *Institute for Juvenile Research, Chicago*. Gradients of cerebral electrical activity related to excitation and adaptation.

ROBERT J. LATINA and WILLIAM P. HURDER, *Louisiana State University*. Effects of anoxic anoxia on golden hamsters' running of eighteen foot straight-a-way.

WILLIAM P. HURDER, DAVID MCARTHUR, and ROBERT LATINA, *Louisiana State University*. Relations between straight-a-way performance and estrous cycle in adult albino rats.

IVAN N. MENSCH and RUTH MATARAZZO, *Washington University Medical School*. Psychological functioning following hemispherectomy.

ALBERT I. RABIN and HARRY W. BLAIR, *Michigan State College*. Effects of alcohol on motor aspects of handwriting.

## Social Psychology

DONALD T. CAMPBELL, *University of Chicago*,  
Chairman

Document 3281; Microfilm, \$1.00;  
Photoprints, \$2.85

G. F. KING, J. C. EHLMANN, and D. M. JOHNSON, *Michigan State College*. Experimental analysis of the reliability of observations of social behavior.

BENJAMIN POPE, *Washington University Medical School*. Social-economic contrasts in children's poor culture prestige values.

JAMES V. MITCHELL, JR., *University of Chicago*. An analysis of social class differences in variability of mental test performance.

MILTON ROKEACH, *Michigan State College*. Attitude as a determinant of "slips of the tongue."

JOSEPH E. MORSH and MADORAH E. SMITH, *Human Resources Research Center, Chanute Air Force Base, Illinois*. Judgment of prejudice before, during and after World War II.

HARRY A. GRACE and JACK OLIN NEUHAUS, *University of Illinois*. A structural analysis of international hostility by a new scaling technique.

ALMA LONG, *Purdue University*. Adolescents' selection of ideas for resolving some problems in social behavior.

## Group Dynamics

DORWIN CARTWRIGHT, *University of Michigan*,  
Chairman

Document 3281, *cont.*

ROBERT L. FRENCH and DOROTHY W. MURPHY, *Northwestern University*. Size as a factor in the structuring of small, leaderless groups.

RICHARD A. KRAMER and ROBERT L. FRENCH, *Northwestern University*. Motivation as a factor in the behavior of small, leaderless discussion groups.

BERNARD M. BASS, *Louisiana State University*. Differential response patterns in initially leaderless discussions related to discussion and external status.

MURRAY HORWITZ, *University of Illinois*, and DORWIN CARTWRIGHT, *University of Michigan*. A projective method for the diagnosis of group properties.

FRANCIS J. BLAISDELL and FRED E. FIEDLER, *University of Chicago*. Objective measurement of unconscious attitudes in a social group.

MARY TAYLOR and PAUL TORRANCE, *Kansas State College*. Self-concept as a determinant of Socio-metric status.

#### Symposia

##### Measuring the Effectiveness of Psychotherapy

L. J. CRONBACH, *University of Illinois*, Chairman

Participants: IRWIN A. BERG, L. J. CRONBACH, ALLEN L. EDWARDS, ROBERT I. WATSON

##### Conditioned Anxiety

BENTON J. UNDERWOOD, *Northwestern University*, Chairman

Participants:

H. W. COPPOCK, *University of Missouri*. Non-avoidance of a stimulus associated with onset of electric shock.

H. F. HUNT, *University of Chicago*, and JOSEPH V. BRADY, *Medical Service Corps, U. S. Army*. "Anxiety" and "punishment": A preliminary comparison between their effects on an operant response.

JUDSON S. BROWN, H. I. KALISH, and I. E. FARBER, *State University of Iowa*. Conditioned fear as revealed by magnitude of startle response to an auditory Stimulus.

JOSEPH V. BRADY, *Medical Service Corps, U. S. Army*, and H. F. HUNT, *University of Chicago*. The effect of electro-convulsive shock on a conditioned emotional response ("anxiety"): On the permanence of the effect.

R. M. CHAMBERS and H. W. COPPOCK, *University of Missouri*. Effects of prior, immediate, and delayed reward upon conditioning of the galvanic skin response.

Discussants:

O. HOBART MOWRER, *University of Illinois*.

G. ROBERT GRICE, *University of Illinois*.

##### The Experimental Validation of the Rorschach

ARTHUR L. BENTON, *State University of Iowa*, Chairman

Participants: S. J. BECK, A. L. BENTON, I. N. MENSCH, M. WILLIAMS.

Discussants: L. J. CRONBACH, J. B. ROTTER, G. B. DIMMICK, W. L. WILKINS.

##### The Industrial Psychologist in a Defense Economy

JAY L. OTIS, *Western Reserve University*, Chairman

Participants: A. W. MELTON, E. K. TAYLOR, H. C. TAYLOR, D. WOLFLE.

##### The Use and Misuse of Factorial Theory in the Study of Personality

MERRILL ROFF, *University of Minnesota*, Chairman

Participants: R. B. CATTELL, W. STEPHENSON, D. R. SAUNDERS.

Discussants: H. P. BECHTOLDT, C. H. COOMBS.

##### Professional Problems of School Psychologists

FRANCES A. MULLEN, *Chicago Board of Education*, Chairman

Participants:

EDNA R. OSWALT, *Kent State University, Kent, Ohio*. Training of school psychologists.

BOYD R. MCCANDLESS, *Ohio State University*. Problems of training with reference to certification of school psychologists.

HARRIET O'SHEA, *Purdue University*. The school psychologist's responsibility to the gifted child.

ROSINA M. BROWN, *Cleveland Public Schools*. Functions of state and local groups of school psychologists.

SAMUEL A. KIRK, *University of Illinois*. The school psychologist's responsibilities to the mentally handicapped child.

*Manuscript received July 9, 1951*



# PROCEEDINGS OF THE TWENTY-SECOND ANNUAL MEETING OF THE EASTERN PSYCHOLOGICAL ASSOCIATION

CHARLES N. COFER, *Secretary*

*University of Maryland*

THE Eastern Psychological Association held its twenty-second annual meeting at Brooklyn College and the St. George Hotel on March 30 and 31. A total of 1,367 persons was registered, as compared to last year's registration of 1,003. Those registered at Brooklyn included 548 EPA members, 321 APA members who joined EPA at the meeting, and 498 guests. The members of the Association now number approximately 1,780, an increase of 460 over the figure of a year ago.

There was no banquet at this year's meeting, but, at a general session, the Association was greeted by Dean William R. Gaede and President Harry Gideonse of Brooklyn College. Dr. Carl I. Hovland, president of EPA, gave the main address at this session, entitled "Changes in Attitudes Through Communication." He reviewed a program of research being conducted under his direction, citing illustrations of problems being studied, of theoretical analyses that have been made, and of difficulties encountered in the area of attitude research. Of especial interest was his application of stimulus response learning theory to the attitude change problem. Attitudes, according to Dr. Hovland, are "internalized anticipatory approach or avoidance tendencies toward objects, persons or symbols," and, in the light of this definition, much of his research on attitude and attitude change is concerned with symbolic processes which mediate behavior and the conditions facilitative of the acquisition, elimination, arousal, persistence, and transfer of such processes.

## ANNUAL MEETING

The Proceedings of the 1950 meeting were approved, as published in the *American Psychologist*, September, 1950. It was announced that Frank A.

Beach had been elected President (1951-52) and that James J. Gibson and Clifford T. Morgan had been elected to regular terms on the Board of Directors (1951-54). E. B. Newman was elected to complete the term of Frank A. Beach on the Board (1949-52). The Program Committee reported the receipt of 134 abstracts, of which 97 were scheduled, 1 was withdrawn, and 36 were rejected. This Committee consisted of W. C. H. Prentice, Chairman, J. M. Bobbitt, and A. Chapanis. Eleven non-APA member applicants were elected to membership and two were rejected. The Committee on Academic Freedom (E. B. Newman, Chairman, J. J. Gibson, and D. W. Chapman) was continued for another year, with instructions to consider EPA's role in the matter of Academic Freedom. The Membership voted to empower the Board to cancel or to reduce the annual meeting in length should emergency conditions require such action. The Association voted to hold its 1953 convention in Boston. The 1952 meeting will be held in Atlantic City on March 28-29. A budget of \$1,705 was adopted for the next year. New appointments made by the Board are: Auditing Committee, W. A. Bousfield and Josephine Kurtz; Representatives to Council, AAAS, H. W. Rogers and T. C. Schneirla. Before adjournment, the Association approved a vote of thanks to Brooklyn College, the St. George Hotel, and the Local Arrangements Committee for the excellent facilities provided for the meeting. The Local Arrangements group consisted of E. Fehrer, Chairman, P. Bretnall, H. A. Witkin, E. Raskin, A. H. Maslow, J. Sakoda, H. Sands, and O. L. Schlesinger.

The audited financial statement of the treasurer, Wilbert S. Ray, follows:

## FINANCIAL STATEMENT AS OF MAY 1, 1951

For the Fiscal Year 1950-51

## INCOME

Membership Dues	
Dues for current year, 1950-51 ....	\$1335.10
Arrears for 1949-50 .....	98.96
Arrears for earlier years .....	24.00
Dues paid in advance .....	98.00
Guest fees .....	517.00
Sale of programs .....	3.25
Interest on savings account .....	43.64
Total Income .....	\$2119.95

## EXPENDITURES

Publication of Proceedings .....	\$ 171.20
Office of the Secretary .....	500.00
Office of the Treasurer .....	220.75
Printing, supplies, postage .....	511.81
Traveling expenses of officers .....	70.66
Program Committee .....	7.20

Miscellaneous .....	19.79
Special appropriation .....	101.11

Total Expenditures .....	\$1602.52
Surplus for 1950-51 .....	517.43

## BALANCE SHEET

Cash: Bank of New York and Fifth Avenue Bank .....	\$2175.61
New York Savings Bank .....	2210.40
Cash in Treasurer's Hands .....	4.00
Total Cash .....	\$4390.01
Capital: As of May 1, 1950 .....	\$3872.58
Surplus for 1950-51 .....	517.43
Total Capital .....	\$4390.01

We, the Auditing Committee for the year 1950-51, have examined the records in connection with this statement and find it to be a true and correct account.

Signed .....  
JOSEPHINE C. KURTZ      WESTON A. BOUSFIELD

## PROGRAM

## Animal Learning I

CONRAD MUELLER, *Columbia University*, Chairman

Response potential as a function of effort.  
MORTIMER H. APPLEZWEIG, *Wesleyan University*.

A further study of the formation of a learning set with monkeys. H. W. BRAUN, H. W. BARNES, and ROBERT MILLER, *University of Pittsburgh, Western Psychiatric Institute and Clinic*.

The influence of extra-maze cues in latent learning.  
OTELLO L. DESIDERATO, *New York University*.

The effect of transparent vs. opaque screen guidance in the alternation of fixated responses in the rat.  
ROBERT S. FELDMAN and J. ROBERT NEWMAN, *University of Massachusetts*.

Sustained behavior under delayed reinforcement.  
C. B. FERSTER and B. F. SKINNER, *Harvard University*.

The effects of satiation on extinction of a response.  
J. V. HARALSON, *Cornell University*.

## Physiological Psychology

SHERMAN ROSS, *University of Maryland*, Chairman

Effect of total light flux on c.f.f. after lesions of the frontal lobes. W. S. BATTERSBY, M. B. BENDER,

and H. L. TEUBER, *Psychophysiology Laboratory, Bellevue Medical Center, New York University*.

Cortical localization of taste in the albino rat.  
R. M. BENJAMIN and CARL PFAFFMANN, *Brown University*.

Salt discrimination thresholds in normal and in adrenalectomized rats under the conditions of thirst and electrical shock motivations. ARTHUR E. HARRIMAN and ROBERT B. MACLEOD, *Cornell University*.

Simultaneous judgments as the necessary condition for demonstrating kinesthetic figural after-effects.  
ROBERT JAFFE, *Psychophysiological Laboratory, Bellevue Medical Center*.

The effects of electro-shock convulsion upon previously fixated patterns of response in the albino rat. F. H. PALMER and G. MCCLEARN, *Allegheny College*.

Effects of castration upon mating behavior in male dogs. C. M. ROGERS, C. A. MILLER, G. E. LEVINSON, S. J. TATZ and F. A. BEACH, *Yale University*.

A construction and attempted validation of sensory sweetness scales. SHELTON MACLEOD, *Hobart College*.

### Personality

ABRAHAM H. MASLOW, *Brooklyn College*, Chairman

Cultural influences on personality test responses.

BENJAMIN F. AULD, JR., *Yale University*.

An exploratory study of differential parental identification in early adolescence. A. J. BRODBECK and LEON ZOGLIN, *Boston University and University of Illinois*.

A study of McClelland's method for inducing and scoring need achievement. WILLIAM F. FIELD, *University of Maryland*.

Psychological stress and its personality correlates. R. S. LAZARUS and C. W. ERICKSEN, *The Johns Hopkins University*.

Cognitive rigidity as a function of the personality variable security-insecurity. BERNARD MEER and MILDRED E. GEBHARD, *University of Pennsylvania*.

### General Psychology

HAROLD SEASHORE, *The Psychological Corporation*, Chairman

Management quality and its effect on selection test validity. LEONARD W. FERGUSON, *Metropolitan Life Insurance Company*.

Observations on supervisors' ratings as criteria. HOWARD J. HAUSMAN, *Human Resources Research Laboratories, Bolling Air Force Base*.

A study of the comparability of results of three widely used intelligence tests for secondary school students. ROGER T. LENNON, *World Book Company*.

Effects of scoring formula on Kuder-Richardson reliability coefficients. MARION F. SHAYCOFT, *National League of Nursing Education*.

A comparative study of the acquisition of word-meanings in differentially educated adults and children. BERNARD KAPLAN, *Clark University*.

### Visual Perception I

CLARENCE H. GRAHAM, *Columbia University*, Chairman

The perception of verticality as a function of angular displacement of the body. K. A. CHANDLER and H. WERNER, *Clark University*.

Perception of verticality as a function of rotation around the vertical axis. R. B. MORANT and S. WAPNER, *Clark University*.

Experiments with homogeneous visual stimulation.

JAMES J. GIBSON, *Cornell University*.

The apparent depth of the Ganzfeld as a function of intensity of illumination. CAROL BARNES HOCHBERG and JULIAN E. HOCHBERG, *Cornell University*.

The apparent length of a line as a function of its inclination. W. T. POLLOCK and A. CHAPANIS, *The Johns Hopkins University*.

### Vision

ALPHONSE CHAPANIS, *The Johns Hopkins University*, Chairman

A component of the human electroretinogram associated with red color vision. JOHN C. ARMINGTON and LORRIN A. RIGGS, *Brown University*.

The importance of stray light in the human electroretinogram. ROBERT M. BOYNTON and LORRIN A. RIGGS, *Brown University*.

Analysis of existing measurements relating the size of the natural pupil to the external light stimulus. S. G. DEGROOT and J. W. GEBHARD, *The Johns Hopkins University*.

The visibility curve for small foveal areas. C. H. GRAHAM and YUN HSIA, *Columbia University*.

The effect of anoxia on the cat's retinogram. MARTHA J. GUASTELLA, *USN Medical Research Laboratory, New London*.

The binocular fusion of yellow in relation to color theories. LEO M. HURVICH and DOROTHEA JAMESON, *Eastman Kodak Company*.

Sensitivity of the dark adapted eye to stimuli of different sizes. JO ANN SMITH and FORREST L. DIMMICK, *USN Medical Research Laboratory, New London*.

### Applied Experimental

JACK W. DUNLAP, *Dunlap & Associates, Inc.*, Chairman

Steady state analysis of motor responses in human servo-systems. I. The anticipatory nature of tracking responses. R. A. PATTON, J. F. PIERCE, and G. W. ALBEE, *University of Pittsburgh, Western Psychiatric Institute and Clinic*.

Steady state analysis of motor responses in human servo-systems. II. Analytical techniques for dual time series. J. F. PIERCE, R. A. PATTON, and G. W. ALBEE, *University of Pittsburgh, Western Psychiatric Institute and Clinic*.



Steady state analysis of motor responses in human servo-systems. III. The relationships between and reliability of tracking behavior and spontaneous motor rhythms. G. W. ALBEE, R. A. PATTON, and J. F. PIERCE, *University of Pittsburgh, Western Psychiatric Institute and Clinic.*

The speed and accuracy of discriminating differences in hue, brilliance, area, and shape. J. P. BERGER and JOHN VOLKMANN, *Vassar College and Mount Holyoke College.*

Performance on the modified SAM two-hand coordinator as a function of the relations between direction of rotation of controls and direction of movement of display. E. B. NORRIS and S. D. S. SPRAGG, *University of Rochester.*

Performance on the modified SAM two-hand coordinator as a function of the radius of the controls. P. SWARTZ and S. D. S. SPRAGG, *University of Rochester.*

Visual performance at low photopic brightness levels as a function of the brightness of an immediately preceding visual task. J. W. WULFECK and S. D. S. SPRAGG, *University of Rochester.*

### Projective Techniques

AUSTIN B. WOOD, *Brooklyn College*, Chairman

A judgment scale applied to Rorschach whole responses in estimating intelligence. IRVING BIALICK, *University of Pittsburgh.*

Perceptual sensitization and defense in projective testing. C. W. ERIKSEN and R. S. LAZARUS, *The Johns Hopkins University.*

A comparison of Rorschach protocols of Amish-Mennonite children with those of non-Amish children of the same rural schools. RALPH R. FLAUGHER, *University of Pittsburgh.*

An experimental approach to the validation of the paroxysmal vector in the Szondi test. GEORGE D. GOLDMAN, *F. D. Roosevelt VA hospital.*

The relationship between factors with common psychological rationale on the Wechsler-Bellevue and Rorschach. JULES D. HOLZBERG and LILLIAN BELMONT, *Connecticut State Hospital.*

Group Rorschachs of psychologists. ANNE ROE, *New York City.*

A comparison of Szondi ego stage and chronological age in children. JOHN W. WHITMYRE, *University of Pittsburgh.*

### Visual Perception II

WILLIAM C. H. PRENTICE, *Swarthmore College*  
Chairman

The influence of figure-ground relationships on binocular rivalry. LAWRENCE T. ALEXANDER, *The Johns Hopkins University.*

Binocular size-distance perception. ALBERTA S. GILINSKY, *Vassar College.*

Two kinds of perceived size and perceived distance. HOWARD E. GRUBER, *Queens University.*

On the determinants of perceived brightness. ERIC HEINEMANN, *Cornell University.*

Brightness as a function of perceived spatial form. JULIAN E. HOCHBERG, *Cornell University.*

An investigation of autokinetic movement under gradations in illumination of the visual field. ABRAHAM S. LUCHINS, *McGill University.*

### Animal Learning II

HOWARD H. KENDLER, *New York University*,  
Chairman

The effects of change of drive upon T-maze performance with different degrees of drive. SEYMOUR LEVINE, *New York University.*

Displacement: Greater generalization of approach than avoidance in a generalized approach-avoidance conflict. NEAL E. MILLER and DORIS KRAELING, *Yale University and Smith College.*

Displacement: Is the gradient of generalization of avoidance steeper than approach when age of the habit and distribution of training trials is controlled? EDWARD J. MURRAY, *Yale University.*

Stimulus generalization before and after extinction. F. R. BRUSH, R. R. BUSH, W. O. JENKINS, W. F. JOHN, and J. W. M. WHITING, *Princeton University and Harvard University.*

The relation between exploratory behavior and spontaneous alternation in the white rat. KAY C. MONTGOMERY, *Cornell University.*

The effect of a food reinforcement immediately preceding the performance of an instrumental conditioned response on the extinction of that response. MOHAMED O. NAGATY, *Yale University.*

### Presidential Address and Annual Business Meeting

HADLEY CANTRIL, Chairman

Greetings from Brooklyn College: WILLIAM R. GAEDE, Dean of the Faculty and President HARRY GIDEONSE.

Presidential Address: *Changes in Attitudes Through Communication*, CARL I. HOVLAND.

Reception: Host, Psychology Department, Brooklyn College.

## SYMPOSIA

### Professional Organization in Clinical Psychology

ANNE ROE, Chairman

1. ANNE ROE, Division of Clinical and Abnormal Psychology.
2. S. G. ESTES, Conference of State Psychological Associations.
3. C. N. COFER, Eastern Psychological Association.
4. A. ELLIS, New York Society of Clinical Psychologists.
5. ROLLO MAY, Association of Analytic Psychologists.

(This Symposium was sponsored by the Division of Clinical and Abnormal Psychology, APA)

### Sociometric Acceptance, the Psychegroup and the Sociogroup, and Background Factors—Critically Evaluated

LEROY BOWMAN, Brooklyn College, Chairman

Participants:

- M. R. FEINBERG, Brooklyn College, and Richardson, Bellows and Henry and Company.  
 J. McV. HUNT, Community Service Society of New York and New York University.  
 HELEN HALL JENNINGS, New York University.  
 Discussant: KENNETH F. HERROLD, Columbia University.

### How Should the School Psychologist Distribute His Time?

ALBERT J. HARRIS, Queens College, Chairman

Participants:

- KATHRINE E. D'EVELYN, Great Neck, New York Public Schools.  
 ALMA PAULSEN, Board of Education, New York City.

EDWARD A. RICCIUTI, Department of Education, Waterbury, Conn.

KIRK SEATON, Elizabeth, New Jersey Public Schools.

(This Symposium was sponsored by the Division of School Psychologists, APA)

## Audition

IRA J. HIRSH, Harvard University, Chairman

Cochlear potentials in the conscious cat. J. DONALD HARRIS, USN Medical Research Laboratory, New London.

Neural responses to clicks at the round window: A statistical interpretation. WILLIAM J. MCGILL and WALTER A. ROSENBLITH, Harvard University.

The form of the curve for the recruitment of loudness. CECIL K. MYERS and J. DONALD HARRIS, USN Medical Research Laboratory, New London.

A comparison of three scales of loudness. W. R. GARNER, The Johns Hopkins University.

Role of the auditory areas of the cortex in intensity and frequency discrimination. DAVID H. RAAB and RICHARD EHMER, Brooklyn College and University of Rochester.

Recovery from auditory fatigue of short duration. A. I. RAWNSLEY and J. DONALD HARRIS, USN Medical Research Laboratory, New London.

Relations between the inferior colliculus and auditory cortex. BURTON S. ROSNER, Yale University.

The effect of temperature on potentials from the excised cochlea. A. D. STOVER and J. DONALD HARRIS, USN Medical Research Laboratory, New London.

The effect of sensation level on the DL for pitch. S. E. STUNTZ, USN Medical Research Laboratory, New London.

## Clinical Psychology

SOLOMON MACHOVER, Kings County Hospital, Chairman

A clinical investigation of the role of the therapist in group psychotherapy. SAMUEL GROB, Harvard University.

A comparative study of tests for the detection of mental deterioration. BERNICE M. GURVICH, The Personnel Laboratory.

A study of psychological diagnostic skill as employed in the clinical investigation of personality. J. Q. HOLSOPPLE and JOSEPH G. PHELAN, *Veterans Administration and Stevens Institute of Technology*.

Three obverse factorial studies of psychotic patient behavior and symptomatology. MAURICE LORR and JAMES Q. HOLSOPPLE, *Veterans Administration*.

Symptom patterns in a group of mental hospital patients. J. R. WITTENBORN, *Yale University*.

A study of imprisoned sexual and non-sexual offenders by means of the Blacky Pictures Test. HAROLD LINDNER, *University of Maryland*.

A study of rigid behavior and its relationship to concrete and abstract thinking. IRENE PIERCE, *Wellesley College*.

Quantification of the Bender-Gestalt Test for children six to fourteen years of age. B. J. SUTTELL and G. R. PASCAL, *University of Pittsburgh, Western Psychiatric Institute and Clinic*.

An evaluation of glutamic acid in mental deficiency. RALPH N. ZABORENKO and GUINEVERE S. CHAMBERS, *Western Psychiatric Institute and Clinic*.

### Social Psychology

S. STANSFELD SARGENT, *Barnard College, Chairman*

An experimental study of the effects of anxiety-arousing appeals in mass communications. SEYMOUR FESHBACH and IRVING L. JANIS, *Yale University*.

Effects of preparatory propaganda on reactions to subsequent events: An experimental study based on opinion reactions to the announcement of Russia's A-bomb explosion. IRVING L. JANIS, ARTHUR A. LUMSDAINE, and ARTHUR GLADSTONE, *Yale University and U. S. Air Force*.

A comparison of leadership ratings made and received by student-raters. HENRY N. RICCIUTI, *Educational Testing Service*.

Sexual development in Israel youth. BENJAMIN WOLMAN, *College of the City of New York*.

A study of authoritarianism and ethnic prejudice in a Negro sample. RICHARD CHRISTIE, *New York University*.

Social facilitation in the feeding of the male albino rat. JOYCE G. HARRINGTON and T. R. VALLANCE, *University of Massachusetts*.

Volunteer-error in the Kinsey study. A. H. MASLOW and J. SAKODA, *Brooklyn College*.

### Visual Perception III

H. A. WITKIN, *Brooklyn College, Chairman*

Visual duration thresholds as a function of experimentally controlled verbal frequency. RICHARD L. SOLOMON, *Harvard University*.

The judgment of perceived tallness for neutral and meaningful stimuli. JUDY F. ROSENBLITH, *Cambridge Junior College*.

The relationship between apparent displacement and motion in the oculogyral illusion. ROBERT H. BROWN, HENRY A. IMUS, JORMA I. NIVEN, and ASHTON GRAYBIEL, *School of Aviation Medicine, Pensacola*.

The addition of psychological area. JANE DODGE and HORACE CORBIN, *The Johns Hopkins University and Mount Holyoke College*.

The effect of the area and density of visual stimuli as parameters in the discrimination of visual number. M. J. GRAHAM, *Mount Holyoke College*.

The accuracy of visual perception of scale pointer position as a function of the presented number of different positions. H. W. HAKE and W. R. GARNER, *The Johns Hopkins University*.

### Human Learning

GREGORY RAZRAN, *Queens College, Chairman*

Word association as a function of the Thorndike-Lorge frequency of the stimulus words. CHARLES N. COFER and REUBEN SHEVITZ, *University of Maryland*.

Responses in a Thorndikian multiple choice situation as a function of varying proportions of reinforcement. A. E. GOSS and E. J. RABAIOLI, *University of Massachusetts*.

Work-decrement factors in rote verbal learning. KENNETH H. KURTZ and CARL I. HOVLAND, *Yale University*.

Size estimations of children as a function of reinforcement. WILLIAM W. LAMBERT, *Brown University*.

Discrimination reversal in human learning using 'social' stimuli. RICHARD D. WALK and RICHARD L. SOLOMON, *Harvard University*.

### Clinical Case Conference and Exhibit of Annotated Human Figure Drawings

Department of Psychology, Kings County Hospital

*Manuscript received May 9, 1951*



# PROCEEDINGS OF THE TWENTY-FIRST ANNUAL MEETING OF THE ROCKY MOUNTAIN BRANCH OF THE AMERICAN PSYCHOLOGICAL ASSOCIATION

LAWRENCE S. ROGERS, *Secretary-Treasurer*

*Veterans Administration, Denver*

THE Rocky Mountain Branch of the American Psychological Association held its twenty-first annual meeting with the Psychology Section of the Colorado-Wyoming Academy of Science on April 27, 1951, at the University of Denver, Denver, Colorado. In addition to the regular meetings, a luncheon was held at which Dean Robert H. Bruce, of the University of Wyoming, spoke on "The Experience of a Psychologist in Hawaii."

Dr. Theodore H. Cutler, President, served as chairman of the business meeting. At the request of the Committee on Intraprofessional Relationships in Psychology, their report on "Fields of Psychology and their Implication for Practice and Training" was discussed. Several members felt that there were serious omissions and the outcome of these discussions will be forwarded to the Committee.

Dr. J. Lewis Yager reported on the activities of the Legislative Committee of the Colorado Psychological Association. Efforts are now being made to have a licensing rather than a certification law enacted.

Some discussion was held with reference to the programs of future meetings. Upon the motion of Dr. Anna Y. Martin, it was decided not to have concurrent sessions in the future. If the number of papers warrants it, meetings shall be for a day and a half. It was voted to have occasional meetings in Utah and New Mexico, on the motion of Dr. Robert H. Bruce.

The resignation of Dean David Morgan, President-elect, was reluctantly accepted. Dr. Herbert Klausmeier, Colorado State College of Education, was elected President for the year 1951-52. Dr. Lawrence S. Rogers was re-elected Secretary-Treasurer for a three-year term.

## PROGRAM

Friday Morning

### Clinical Psychology

E. ELLIS GRAHAM, Chairman

Identification of therapist behavior units as a basis for experimental investigation of psychotherapy. DONALD D. GLAD, *Colorado Psychopathic Hospital.*

Differential client behavior following feeling formulation versus social activity formulations. VIRGIL W. HARRIS, WALTER D. ADAMS, and DONALD D. GLAD, *Colorado Psychopathic Hospital and the University of Denver.*

Differential client behavior following client-centered versus relation-centered therapist remarks. WALTER D. ADAMS, VIRGIL W. HARRIS, and DONALD D. GLAD, *Colorado Psychopathic Hospital and the University of Denver.*

Differences in client reactions to variations in therapist expressive behavior. LYNN SMITH, DAN H. WOODWARD, and DONALD D. GLAD, *Colorado Psychopathic Hospital and the University of Denver.*

The use of the performance scale in the WISC in determining the intelligence of the non-hearing child. ESTHER SHAPIRO, *University of Denver.*

Rorschach test scores as indicators of intelligence. LOWELL M. WIESE and LILLIAN PORTENIER, *University of Wyoming.*

The Wechsler scale as a diagnostic tool for cases of reading disability. WILMA HIRST and LILLIAN PORTENIER, *University of Wyoming.*

Psychiatric diagnosis with Rorschach factor relationships. ROBERT L. BRIGDEN, *Veterans Administration Hospital, Fort Lyon, Colorado.*

The inter-relationships among acceptance—rejection, self—other identity, insight into self, and realistic perception of others. RALPH D. NORMAN, *University of New Mexico*.

The Rorschach pattern of non-deteriorated epileptics. ANNA Y. MARTIN, *New Mexico Highlands University*.

Some aspects of native Korean child training. GORDON W. HEWES, *University of Colorado*.

### General and Experimental Psychology

KARL F. MUENZINGER, Chairman

An interpretation of creativity in terms of goal and mode orientation. JOEL E. GREENE and JACK R. GIBB, *University of Colorado*.

Criteria for selection of measurement media in the study of creativity. HARRY A. SHOEMAKER and JOEL E. GREENE, *University of Colorado*.

The relationship between mode variability and creativity. DAVID T. BENEDETTI and PETE O. JOHNSON, *University of Colorado*.

The effect of differential orientation upon certain variables in problem-solving. PETE O. JOHNSON and DAVID T. BENEDETTI, *University of Colorado*.

The effect of differential degrees of goal attainment upon mode persistence. FRED TODD and JACK R. GIBB, *University of Colorado*.

Mode orientation trace as a function of time in mode to solution. BENJAMIN B. WEYBREW and JOEL E. GREENE, *University of Colorado*.

Level of aspiration technique in the longitudinal study of personality development. LEON J. YARROW, *The Child Research Council*.

An experimental test of the relationship—reinforcement hypothesis. LEWIS BERNSTEIN, *University of Colorado*.

An experimental analysis of the function of electric shock for correct responses into two components. WILLIAM O. BROWN, WAYMAN J. CROW, ROBERT F. POWLOSKI, and K. F. MUENZINGER, *University of Colorado*.

A simplified substitute for the centroid method in factorial analysis. BENJAMIN WEYBREW and K. F. MUENZINGER, *University of Colorado*.

Effect of the motivation variable upon learning of an incidental cue. ED. JOHNSON, *University of Colorado*.

A study of latent learning through negative transfer. K. F. MUENZINGER and DON CONRAD, *University of Colorado*.

A study of latent learning. WILSON WALTHALL, JR., *University of Wyoming*.

Response acquisition as a function of delay of reinforcement. ELAINE E. HOLDER, *New Mexico A & M College*.

Relationship of primary mental abilities and achievement in senior high school. MAYBELLE FERGUSON, *Colorado A & M College*.

### Friday Afternoon

#### Symposium: Present Status and Future of Psychology in Rocky Mountain Area

LAWRENCE S. ROGERS, Chairman

#### Participants:

WILTON P. CHASE, Lowry Air Force Base.  
THEODORE H. CUTLER, University of Denver.  
DONALD D. GLAD, Colorado Psychopathic Hospital.  
E. ELLIS GRAHAM, University of Denver.  
KENNETH HAMMOND, University of Colorado.  
LILLIAN PORTENIER, University of Wyoming.

*Manuscript received May 8, 1951*

## Across the Secretary's Desk

### The Members Talk about APA Problems

In an effort to bring useful data to the service of the democratic process within the APA and to supplement normal intuitions, of both members and officers, about the proper areas for organized APA actions, we included on last spring's National Register-APA Directory questionnaire an item intended to reveal members' ideas about problems the Association faces. Jane Hildreth and I felt that if we succeeded in getting members of APA to say what they regarded as significant problems facing us, we would have facts of considerable general utility to anyone who is concerned about the value to himself and to his fellow psychologists of APA membership. Such facts would enable any member to see how widely shared—or how widely unshared—are his own concerns. And such facts would serve perhaps to keep officers of the Association from becoming so busy with the implementation of last year's attacks on last year's problems that they do not see, quickly and keenly, new needs for organized action, new ways for the organization to serve the interests of its members.

The principle problem-relevant item was the free-response question: "What do you think are the most important problems, *not* related to the national emergency, that will confront the APA in the next five years?" We selected a sample of 378 respondents (approximately every twentieth questionnaire in an alphabetized array) and classified the answers. The results appear in Table 1.

The results show that relatively few members worry about intra-organizational affairs, with a total of only about 10 per cent of our sample mentioning such things as divisional problems, APA structure, placement procedures, membership requirements, publication problems, and the convention program. It is very probable that five years ago the concern with our own internal structures and processes was much greater. Now we at least *feel* relatively well organized and tend to turn our thinking to less introverted concerns—to problems of legislation, interprofessional relations, ethics, public relations, standards of training, etc.

An even more outstanding aspect of these data is that almost all of the eight most frequently mentioned problems are related to matters that are pri-

marily professional rather than academic or scientific in nature. Psychology has become a profession. It is a new and in many ways a strange profession. Its attempts to establish itself more firmly, to organize itself meaningfully, to guide itself wisely, occupy the minds of a great many psychologists. It seems very clear that in the future as in the recent past, members of the Association will want the APA to devote itself to problems growing out of psychology's growth as a profession. We are obviously no longer a group of college professors trying to get along. Psychology is now much more than a scientific discipline. Whatever our special interests, whatever our places of employment, whatever our degree of enthusiasm for it, and whether our hair is long or crew-cut, all of us who

TABLE 1

*Problems foreseen by members, ranked in order of frequency.*  
N = 378

	N	Percentage	
		Academic, Non- Clinical N = 150	Clinical, Non- Academic N = 150
None listed	218	50	55
Licensing, accrediting, and certification	70	15	25
Training standards and policies	57	15	17
Intraprofessional cleavage and problems	40	14	9
Interprofessional relations	33	5	14
Ethics	28	5	9
Public relations	25	6	8
Need for psychology to contribute to social needs	22	8	5
Need for basic research	19	7	4
APA structure	14	4	4
Membership requirements	10	3	3
Publication problems	7	3	1
Status of non-PhD's	6	1	3
Psychotherapy	5	1	2
Placement revision	3	2	—
Salaries (too low)	3	1	1
ABEPP	3	—	2
Test standards and distribution	3	1	1
Member participation (not enough)	2	1	1
Division consolidation and problems	2	—	1
Convention program	2	—	—
Social security benefits	1	1	—



bear the label "psychologist" are involved in psychology's development as a profession. The data in Table 1 suggest which aspects of that development are regarded by our members as most crucial at the moment.

It will be interesting to look at Table 1 with the idea of seeing if current APA structure seems to fit the problems APA members feel to be important. Of the 22 problems listed in the table, almost every one is now the primary concern of an active APA committee. Perhaps the most notable exception is the problem of legislation, but this topic has been much considered by the Conference of State Psychological Associations and will probably have a prominent place on the agenda for the Board of Directors and the Council of Representatives at the 1951 annual meetings. We have no boards or committees to deal specifically with salaries or social security benefits or with the need for basic research, and we do have some committees to deal with problems not explicitly mentioned here, but one gets the general impression that APA mechanisms are currently fairly adequate, at least in design, for meeting the problems the members see as important.

A further aspect of Table 1 gives us a comparison between (a) non-clinical psychologists who hold academic jobs and (b) clinical psychologists who work outside the academic setting. (The clinically oriented academicians and the non-clinical professionals were treated as separate groups but were such small groups in the present sample that they were not included in the table.) The table shows that a few more academic people than practicing clinicians take the time to answer the

question, and that a few more academicians are concerned with intraprofessional cleavages. More of the clinicians than academicians are concerned with legislation. But the differences all along the line are not nearly as great as many would expect. Large numbers of psychologists in colleges and universities feel an involvement in professional problems. A glance at the membership of APA committees dealing with such problems will support the hypothesis that our "pure" people are very willing to pitch in and work for the growth of a sound and decent profession of psychology. Many psychologists whose major interests lie in the scientific rather than the professional field of activity are willing to buy the notion that the development of a profession has important implications for the amount of support available for basic research in the science upon which the profession rests. And when they buy the notion, they accept the responsibility it entails. Sometimes, though they wish primarily to be left alone with their research and teaching, they frankly enjoy the growing acceptance of psychology as a profession and are concerned only that the profession develop in such a way that they need never be ashamed to be called psychologists. Such an observation is not based firmly on our present data; but it is at least consonant with the data and with casual observation of psychologists' attitudes. The observation leads to a further one—if we can find ways for all psychologists, of whatever kind and specialty, to participate in the development of our profession we need not fear for either the quality of the profession nor the strength and unity of the APA.

FILLMORE H. SANFORD

## *Psychological Notes and News*

---

**Caroline McCann Tryon** died in June at her home in Los Angeles following a cerebral hemorrhage she had suffered some months earlier. She had left the University of Chicago in the autumn of 1950 to take a position in the In-Service Training Program in Human Relations of the Los Angeles County Board of Education.

**Robert H. Seashore**, chairman of the department of psychology at Northwestern University, died August 27 while undergoing an operation for peptic ulcer. He was 49 years old.

**Henry A. Imus**, formerly head of the Psychophysiology Branch, Office of Naval Research, transferred in July to the ONR Branch Office in London where he will serve as a research psychologist.

**A. Arthur Hartman**, formerly associate professor of clinical psychology at Boston University, has been appointed director of research and chief psychologist at the Psychiatric Institute of the Chicago Municipal Court.

**Charles S. Gersoni** has been named chief of the Clinical Psychology Section, Neuropsychiatric Service, Walter Reed Army Hospital. For the past four years Colonel Gersoni has been chief of the Clinical Psychology Branch, Psychiatry and Neurology Consultants Division of the Army Surgeon General's office. He is succeeded by **Lieutenant Colonel Frederick A. Zehrer**, who has been chief of the Clinical Psychology Section at Brooke Army Hospital, Fort Sam Houston.

**Steuart Henderson Britt** has joined Needham, Louis and Brorby, Inc., in Chicago as vice president and director of research. He has been director of personnel at McCann-Erickson, Inc.

**Winifred S. Graves**, head psychologist at Central State Hospital, Indianapolis, has accepted an appointment as senior psychologist at Embreeville State Hospital, Embreeville, Pennsylvania.

**Philip I. Sperling** is on a year's leave of absence from Bennington College to work as a research psychologist in the Human Resources Division of the U. S. Air Force, Washington, D. C.

**George S. Welsh** has been transferred to the VA Hospital, Oakland, California, as chief of the clinical psychology section. He is succeeded in the position of chief clinical psychologist at the Oakland VA Mental Hygiene Clinic by **Patrick L. Sullivan**, formerly of Michigan State College.

**Robert A. Bassham** has been appointed clinical psychologist at the Tulsa Child Guidance Clinic. He has been on the staff of Eastern State Hospital, Vinita, Oklahoma.

**Charles P. Gershenson** has accepted a position as research director of the Jewish Children's Bureau of Chicago. He was formerly research associate at the Institute of Psychological Research, Teachers College, Columbia University.

**Wallace R. McAllister** has been awarded a National Research Council Fellowship in the Natural Sciences for the academic year 1951-52. His proposed research is on "Early Visual Experience and its Relation to Performance in Visual Discrimination Problems," and he will work at the State University of Iowa under the supervision of Dr. Kenneth W. Spence.

**William R. Grove** has been appointed chief clinical psychologist at the VA Hospital in Palo Alto, California. For the past two years he has been director of the Child Study Service, Phoenix Elementary Schools in Phoenix, Arizona. **Louis S. Levine**, staff psychologist and supervisor of training at the Palo Alto VA Hospital, is leaving in September to accept the position of director, department of psychology, San Francisco State College.

**Harold B. Pepinsky** was given the "Highest Award" for student personnel research published between July 1946 and July 1949, by the American Council of Guidance and Personnel Associations, for his study, "The Selections and Use of Diagnostic Categories in Clinical Counseling."

The Educational Testing Service has announced that fellowships have been awarded to **H. Paul Kelley**, graduate student at the University of Texas, **Samuel J. Messick**, senior at the University of Pennsylvania, and **Richard E. Wortman**,

graduate student at the University of Washington. **Robert P. Abelson** and **Miles S. Rogers** have been reappointed as Psychometric Fellows for the coming year.

The Social Science Research Council has recently made several awards to psychologists. Faculty Research Fellowships have been awarded to **Allen L. Edwards** to continue research on the measurement of attitudes and personality structure; and **Milton Rokeach** to investigate the nature and determinants of narrow-mindedness and dogmatism, and develop appropriate methods of measurement. Research Training Fellowships have been given to **George A. Austin** for research on the application of higher mathematics to concepts of visual perception; **Christoph M. Heinicke** for training in the theory and techniques of research in child development; **Herbert C. Kelman** for research on the internalization of group goals with special reference to therapeutic groups; **Abraham S. Levine** for research on the relationship of perseveration to theories of learning, personality, and abilities; and **James Olds** for the development and testing of a conceptual scheme relevant to problems of motivation, symbolic processes, and learning.

A new Committee on Identification of Talent has been appointed. Members are **David McClelland**, **Alfred L. Baldwin**, **Urie Bronfenbrenner**, and **Fred L. Strodbeck**. They will plan research on the psychological and social variables related to the ways in which individuals make outstanding contributions to society.

Newly elected officers of the **Illinois Psychological Association** are **Ross Stagner**, president-elect; **Louis McQuitty**, treasurer; **Frances Perce**, **Erika Fromm**, and **William Sloan**, council members; and **T. W. Richards** and **Lyle Lanier**, convening section chairmen. Continuing officers are **Irwin A. Berg**, president; **George S. Speer**, secretary; **James G. Miller**, **Margaret Hall**, **Carl Anderson**, and **Phyllis Wittman**, council members; and **Benjamin Burack**, section chairman.

The **New Jersey Psychological Association** has elected the following officers for the year 1951-52: **A. Ralph Carli**, president; **Bert D. Schwartz**, vice-president; **Frederick J. Gaudet**, executive secretary; **Kermit Oberlin**, secretary-treasurer. Members of the Executive Board are **Nelson**

**G. Hanawalt**, **Harold Carlson**, **Cecilia Kiernan**, and **Albert Ellis**.

The **Louisiana Psychological Association** has elected **Paul C. Young** as president and ex officio representative to the APA, **Loyd W. Roland** as vice-president, and **Bernard M. Bass** as secretary-treasurer and chairman of the steering committee.

Officers of the **Institute for Research in Clinical and Child Psychology** for the current year are **Livingston Welch**, director; **Ross Harrison**, treasurer; and **Bernard Reiss**, secretary. Present active membership of the Institute includes **Louis Long**, **Vincent R. Fisichelli**, **Frank T. Wilson**, **Eugene Hartley**, **Joseph Kubis**, **Frederick Davis**, and **Nicholas Pastore**. The Advisory Council, consisting of **Gardner Murphy**, chairman, **Oskar Diethelm**, **W. H. Gantt**, **Clark L. Hull**, **Rev. Joseph Keegan**, **Wolfgang Köhler**, **Lyle Lanier**, **Nolan D. C. Lewis**, **H. S. Liddell**, **Jules Masserman**, **Robert McLeod**, **James M. O'Gorman**, **Lewis I. Sharp**, **Harold Wolff**, and **Bernard S. Wortis**, was recently reelected.

The department of psychology at **Upsala College** announces an intensive course in Rorschach technique to be given by **Samuel B. Kutash**. The course will run during the school year, with each semester consisting of fifteen sessions held on Thursday evenings, beginning September 27. Administration, scoring, and interpretation of the Rorschach will be considered. No graduate credit will be given, but the course will meet the training requirements for membership in the Society for Projective Techniques. Fee, \$45 per semester. Maximum registration, 20 students, and instructor's approval is required. For further information and application blanks write to **Harold S. Carlson**, Department of Psychology, Upsala College, East Orange, N. J.

The **Bureau of Child Guidance**, **Board of Education**, **New York City Schools** will hold an all day Twentieth Anniversary Conference on October 27, 1951 at the Hotel Astor. **Alma Paulsen** and **George Levinrew** head the Planning Committee. Seven panel meetings making up the morning session will deal with "Child Guidance in a Changing World." The session will be followed by a luncheon at which nationally prominent speakers will be heard.



**Applications for Fulbright awards** for university lecturing and advanced research in Europe and the Near East for 1952-53 must be mailed not later than October 15, 1951, to the Executive Secretary, Committee on International Exchange of Persons, Conference Board of Associated Research Councils, 2101 Constitution Ave., Washington 25, D. C.

**Call for papers.** AAAS, Section I (Psychology) meeting will be held in Philadelphia, December 26, 27, and 28. Single page abstracts should be submitted to the secretary, Delos D. Wickens, 404 University Hall, Ohio State University, Columbus 1, Ohio.

#### VACANCIES

**Intern, clinical psychology**, either sex, beginning September or October; one year graduate work in clinical psychology, no experience necessary. Diagnostic testing and counseling under supervision, with handicapped hospitalized population of children and adults. Stipend, \$75 per month. Apply to Dr. Max Siegel, Director of Clinical Psychology, Jewish Hospital for Chronic Diseases, East 49th St. at Rutland Rd., Brooklyn 3, New York.

**Intern, industrial psychology**, male, under 30, unmarried, student doing PhD research, to serve in Aruba N.W.I. on special personnel research assignment lasting six months to a year. All expenses plus liberal salary. Work involves investigation of job performance and selection tests, merit ratings, training evaluations, etc. For information write to the Overseas Personnel Office, Room 2225, 30 Rockefeller Plaza, New York 20, N. Y.

**Chief clinical psychologist**, PhD and five years clinical experience required; duties involve coordination and supervision of psychological activities in hospital. Salary range, \$4,860-\$6,075. Apply to E. E. Moriarty, Personnel Manager, Springfield State Hospital, Sykesville, Maryland.

**Clinical psychologist**, female, MA, two years experience with psychotics and mental defectives. Salary range, \$3,675-\$4,520. Apply to Vernon W. Sparks, Crownsville State Hospital, Crownsville, Maryland.

**Intake worker and vocational counselor.** Several years experience in vocational guidance and job placement required. Salary range, \$3,354-\$5,279 automatically, with further increments possible. Apply to Albert Cohen, Executive Director, Jewish Vocational Service, 1249 Griswold, Detroit 26, Michigan.

**Clinical psychologist** to work as member of team with psychiatrist and psychiatric social worker in child guidance clinic. Eventual training of psychological interns. PhD, clinical experience with children and in administration of Rorschach required. Salary, approximately \$4,500. Apply to Alberta Jones, M.D., Director, Child Guidance Clinic of Marion County, 1949 E. 11th St., Indianapolis, Indiana.

**Vacancies for Scientists (psychologists)** in the Regular Commissioned Corps of the U. S. Public Health Service will be filled as a result of an examination to be held in various cities throughout the country on December 4, 5, and 6, 1951. Completed applications must be in the USPHS Washington office by November 9, 1951. Applicants must have, or expect to receive by September 1951, the PhD in psychology. Members of the Commissioned Corps have military status and substantially the same privileges granted members of the Army and Navy. Appointments will be made in the grades of Assistant Scientist and Senior Assistant Scientist, equivalent to Navy ranks of Lieutenant (j.g.) (\$4,486) and Lieutenant (\$5,346) respectively. For information and application forms write to: Surgeon General, U. S. Public Health Service, Federal Security Agency, Washington 25, D. C. Attn: Division of Commissioned Officers.

*Geared to Meet  
Modern Classroom  
Needs . . .*

**Psychological  
Theory: Contemporary Readings**  
**Melvin Marx**

Part I of this unique new book offers a collection of some of the most recent publications on problems of scientific method and theory construction as applied to psychology, and, Part II is an anthology of the work of the most influential psychological theorists of the past two decades. *Published in August—\$5.00*

**The Development of  
Human Behavior**

**R. Dewey & W. J. Humber**

The authors aim to provide the reader with an understanding of how the individual's social behavior and personality develop out of the dynamic interplay of biological and environmental factors. The text treats Social Psychology as a separate field of study in its own right, and not as a branch of other fields. *Published in July—\$5.50*

**Introduction to  
Child Study, 3rd Ed.**

**Ruth Strang**

Contained in the third edition of this non-technical, readable text are more case studies, more direct quotations from children and parents, references to results of recent research, and more illustrations to help the reader to understand better the individual. *Published in May—\$4.75*

**The Macmillan Co.**  
**60 Fifth Ave., N. Y.**

**Convention Calendar**

\*\*\*\*\*

**AMERICAN PSYCHOLOGICAL ASSOCIATION**

August 29–September 3, 1952; Washington, D. C.

*For information write to:*

Dr. Fillmore H. Sanford  
1515 Massachusetts Avenue N.W.  
Washington 5, D. C.

**FOURTH INTERNATIONAL CONGRESS  
ON MENTAL HEALTH**

December 11–19, 1951; Mexico City, D. F.

*For information write to:*

Mrs. Grace E. O'Neill  
Division of World Affairs  
National Association of Mental Health  
1790 Broadway  
New York 19, New York

**EASTERN PSYCHOLOGICAL ASSOCIATION**

March 28–29, 1952; Atlantic City, New Jersey

*For information write to:*

Dr. Charles N. Cofer  
Department of Psychology  
University of Maryland  
College Park, Maryland

**WESTERN PSYCHOLOGICAL ASSOCIATION**

April 25–26, 1952; Fresno, California

*For information write to:*

Dr. Richard W. Kilby  
Department of Psychology  
San Jose State College  
San Jose 14, California

**MIDWESTERN PSYCHOLOGICAL ASSOCIATION**

May 2–3, 1952; Columbus, Ohio

*For information write to:*

Dr. David A. Grant  
Department of Psychology  
University of Wisconsin  
Madison, Wisconsin

## *Classics Among*

### **PSYCHOLOGICAL MONOGRAPHS**

**Thorndike, E. L.** The Mental Life of the Monkey. 1899, #15. \$.50

**Carr, Harvey.** Visual Illusion of Movement During Eye Closure. 1905, #31. \$1.25

**Watson, John B.** Kinaesthetic and Organic Sensations: Their Role in the Reactions of the White Rat to the Maze. 1907, #33, \$1.00

**Shepherd, William T.** Some Mental Processes of the Rhesus Monkey. 1910, #52. \$.75

**Franz, Shepard Ivory and Lafora, Gonzalo R.** On the Functions of the Cerebrum: The Occipital Lobes. 1911, #56. \$1.25

**Fernberger, Samuel W.** On the Relation of the Methods of Just Perceptible Differences and Constant Stimuli. 1912, #61. \$1.00

**Boring, Edwin G.** Learning in Dementia Praecox. 1913, #63. \$1.00

**Langfeld, Herbert S.** On the Psychophysiology of a Prolonged Fast. 1914, #71. \$.75

**Franz, Shepard Ivory.** I. Symptomological Differences Associated with Similar Cerebral Lesions in the Insane. II. Variations in Distribution of the Motor Centers. 1915, #81. \$1.50

**Peckstein, Louis Augustus.** Whole versus Part Methods in Motor Learning. 1917, #99. \$.75

**Kjerstad, Conrad L.** The Form of the Learning Curves for Memory. 1919, #116. \$1.35

**Tolman, Edward C.** Retroactive Inhibition as Affected by Conditions of Learning. 1918, #107. \$.75

---

MANY OF THE EARLY MONOGRAPHS ARE OUT-OF-PRINT.  
ONLY A LIMITED QUANTITY OF THE ABOVE  
NUMBERS ARE AVAILABLE.

---

**AMERICAN PSYCHOLOGICAL ASSOCIATION**

1515 Massachusetts Ave. N.W., Washington 5, D. C.



Announcing a New Text in Social Psychology

# FUNDAMENTALS OF Social Psychology

by EUGENE L. HARTLEY, City College of New York and RUTH E. HARTLEY

Here is a fresh and penetrating study of the individual in his relation to organized social groups. In this book social psychology is seen as a member of the "social science team," which is made up of both sociology and psychology. This text is not social psychology as a psychological *versus* a sociological approach. By establishing the principles of a general social psychology, the authors make it possible to approach the study from either direction.

Much of the literature cited here is not discussed in other texts, and many of the materials are entirely original. In no sense a compilation of existing points of view, this basic text in social psychology is also a primary source of great importance.

## CONTENTS

- |   |   |
|---|---|
| 1. The Field of Social Psychology               | 11. Further Considerations in Socialization |
| I. Communication—The Basic Social Process       | 12. Delinquency (by F. Rouke)               |
| 2. The Importance and Nature of Communication   | III. The Individual and the Group           |
| 3. Task of the Communicator                     | 13. Groups and Group Processes              |
| 4. Task of the Communicant                      | 14. Social Norms                            |
| 5. Nature of the Communiqué                     | 15. Individual in the Group                 |
| 6. Barriers and Facilitations in Communication  | 16. Role (I)                                |
| 7. Dynamics of Mass Communication (by G. Wiebe) | 17. Role (II)                               |
| II. Socialization—Group and the Individual      | 18. Status                                  |
| 8. Socialization is Learning                    | 19. Leadership—Followership                 |
| 9. Perceiving                                   | 20. Attitude and Opinion (with C. W. Hart)  |
| 10. Doing and Feeling                           | 21. Ethnic Attitudes                        |
|   | 22. Modifying Ethnic Attitudes              |
|   | Bibliography                                |
|   | Index                                       |

Ready in January. Approx. 800 pages; \$5.00 text

## Other Borzoi Texts in Psychology

### EMERGENT HUMAN NATURE

A Symbolic Field Interpretation

by WALTER COUTU, The Pennsylvania State College  
459 pages, 10 figures, 6 tables; \$4.25 text (1949)

### PERSONALITY

In Nature, Society, and Culture

Edited by CLYDE KLUCKHOHN and HENRY A. MURRAY, Harvard University  
592 pages, 53 tables and charts; \$5.00 text (1948)

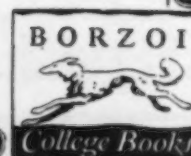
### PROJECTIVE PSYCHOLOGY

Clinical Approaches to the Total Personality

Edited by LAWRENCE EDWIN ABT and LEOPOLD BELLAK  
528 pages, 42 illus., 15 tables; \$6.00 text (1950)

Examination copies on request

ALFRED A. KNOPE, Inc., 501 Madison Avenue, New York 22



# Significant Books on TESTING

## from G & S.

### THEMATIC TEST ANALYSIS

Edited by EDWIN S. SHNEIDMAN, Ph.D., *University of Southern California*, with the collaboration of WALTHER JOEL, Ph.D., and KENNETH B. LITTLE, Ph.D.  
Foreword by HENRY A. MURRAY, M.D.

The contributors to this volume were all sent copies of the TAT and MAPS test protocols of one patient; no case history was sent with the test records. On the basis of the given test material each contributor was asked for a blind interpretation of the protocols in terms of his own method. The results represent an unusual roundtable of thematic test analyses and interpretations on this one case, and an opportunity for comparison, evaluation and synthesis of present methods. Supplementary test and clinical data and conclusions are included.

"Drs. Shneidman, Joel and Little have given us a timely, evenhanded book, unusually well constructed and edited. It is the report of a novel investigation which will interest all clinical psychologists. Teachers should welcome it with special cordiality, for it provides a fine parade of diagnostic intellections which students may oversee as through a one-way mirror without embarrassment and with much profit."

—Henry A. Murray, in the Foreword

Sept. 25      325 pages      illustrated      index      bibliography      about \$8.00

### THE BENDER-GESTALT TEST

By GERALD R. PASCAL, Ph.D., and BARBARA J. TUTTLE, M.A., *Western Psychiatric Institute and Clinic, Pittsburgh.*

This quantified system for scoring the Bender-Gestalt presents a rapid and dependable way of determining the severity of psychiatric disorders in adults. Included are methods, data, instructions, test designs, sample score sheets and a detailed scoring manual.

288 pages      profusely illustrated      bibliography  
index      \$6.50

### BENDER-GESTALT SCORING FORM

In pads of 50 sheets \$1.80      Four pads \$6.50

### THE DYNAMICS OF PSYCHOLOGICAL TESTING

By MILTON GURVITZ, Ph.D., *Hillside Hospital, New York.*

The subtitle to this unique work sets its keynote: *A Formulation and Guide to Independent Clinical Practice.*

The author presents the results of a battery of psychological tests administered to seventeen cases encountered in routine clinical practice. Each case is presented with a complete set of original data, detailed analysis of test factors, a complete case history (in the words of the therapist) and a final evaluation with stress upon faults and errors.

The results are statistically and qualitatively evaluated; statistical criteria are developed to evaluate not only the cases in this book but cases generally.

about 400 pages      26 illustrations      index  
bibliography      \$5.50

*Watch for:*

### RELATION OF PSYCHOLOGICAL TESTS TO PSYCHIATRY

VOLUME VI, *Publications of the American Psychopathological Association.*

Edited by PAUL H. HOCH, M.D. and JOSEPH ZUBIN, Ph.D., *Columbia University.*

Nov. 1951      about 250 pages      illustrated      bibliographies      index      \$5.50

---

**GRUNE & STRATTON, Inc., New York**

---

**Coming in November:**

## **An Introduction to Projective Techniques**

By *Harold H. Anderson (Editor), Professor and Head of Department of Psychology, and Gladys Lowe Anderson (Editor), both at Michigan State College*

Theory, administration, scoring, and interpretation of psychological tests are described by either their originators or recognized experts in this text. Coverage is eclectic and inclusive, embracing all established techniques. Readable and flexible for introductory courses.

Publication November, 1951      812 pages      Illus.      5½" x 8½"

## **Psychology Applied to Life and Work, Second Edition**

By *Harry Walker Hepner, Syracuse University*

The adjustment concept unifies facts and methods of psychology for greater usefulness in this perennially popular text. Intriguing discussion stresses personal, social and business relationships, gives insight into psychodynamics in industry.

Published 1950      724 pages      Illus.      6" x 9"

**TEACHER'S MANUAL**      128 pages      6" x 9"

**STUDENT'S WORKBOOK**      80 pages      8½" x 11"

## **General Psychology for College Students**

By *Wendell W. Cruze, Wilson Teachers College*

All the basic materials of scientific psychology are presented with simplicity and readability for beginners in this text. An accurate picture of the nature of the subject, a fund of practical information, and a sound foundation for advanced work are provided.

Published 1951      648 pages      6" x 9"

**INSTRUCTOR'S MANUAL** by *Wendell W. Cruze*      128 pages      6½" x 10"

**STUDENT'S MANUAL** by *William H. Boyer, University of Idaho, and David K. Hable, Temple University*  
Published 1951      132 pages      6" x 9"

## **Psychology of Adolescence, Fourth Edition**

By *Karl C. Garrison, University of Georgia College of Education*

With new material on physiological, motor and personality development, the growth of attitudes and problems in peer relations, this text has a more expansive and objective treatment, and covers a longer period (10-19 years) than the widely adopted previous edition.

Published 1951      510 pages      Illustrated      6" x 9"

**WORKBOOK** by *Garrison & Drake, published 1951*      91 pages      8½" x 11"

*Send for your copies today!*





# SPECIAL OFFERS

## TO APA MEMBERS AND STUDENT AFFILIATES

DURING SEPTEMBER A SPECIAL MAILING WAS MADE TO ALL MEMBERS AND STUDENT AFFILIATES OF THE AMERICAN PSYCHOLOGICAL ASSOCIATION OFFERING SPECIAL RATES TO PUBLICATIONS OF THE JOURNAL OF CLINICAL PSYCHOLOGY. THIS OFFERING WAS MADE BECAUSE WE WISH TO REACH ALL PSYCHOLOGISTS WORKING IN THE CLINICAL FIELD. WE BELIEVE THAT EVERY CLINICAL PSYCHOLOGIST WILL WANT TO KEEP ABREAST OF THE IMPORTANT STUDIES WHICH WILL APPEAR IN THIS JOURNAL. THE FOLLOWING SPECIAL OFFERS ARE MADE ONLY TO APA MEMBERS. WE CANNOT AFFORD TO SELL TO LIBRARIES AND INSTITUTIONS AT THESE RATES.

---

SPECIAL OFFER #1. COMPLETE BACK VOLUMES, JOURNAL OF CLINICAL PSYCHOLOGY, 1945-51, Vols. I to VII.	PRICE
\$38.00.	Regular Price
	NOW ONLY \$25.00

---

### SPECIAL OFFER #2. CLINICAL PSYCHOLOGY MONOGRAPHS

	Single Copy Price
No. 2. Carter & Bowles: Qualitative Psychological Testing	\$1.25
3. Symposium: Training in Clinical Psychology	1.50
4. Symposium: Critique of Nondirective Counseling and Psychotherapy	1.25
5. Buck: H-T-P Test Manual	2.00
6. Karpman: Objective Psychotherapy	2.00
7. Symposium: Statistics for the Clinician	2.00
8. Tyson: Current Mental Hygiene Practices	2.00
	Regular \$12.00

SPECIAL OFFER ALL 8 MONOGRAPHS \$8.50

---

SPECIAL OFFER #3. ANNUAL SUBSCRIPTIONS, JOURNAL OF CLINICAL PSYCHOLOGY.	Regular price \$6.50	1951 Subscription	\$5.00
		1952 Subscription	\$5.00

Add: Canadian postage \$.50. Foreign Postage \$1.00

### PRINCIPLES OF PERSONALITY COUNSELING

By

FREDERICK C. THORNE, M.D., Ph.D.  
*University of Vermont*

\$5.00

---

Please send cash with order to

**JOURNAL OF CLINICAL PSYCHOLOGY**  
5 PEARL STREET BRANDON, VERMONT

